

**MANAGEMENT AND NON-INFRASTRUCTURE  
SOLUTIONS**

**DISADVANTAGED COMMUNITIES WATER STUDY  
TULARE LAKE BASIN**

**DRAFT PILOT STUDY**

**March 20, 2013**

# **MANAGEMENT AND NON-INFRASTRUCTURE SOLUTIONS**

## **DISADVANTAGED COMMUNITIES WATER STUDY FOR THE TULARE LAKE BASIN**

**MARCH 20, 2013  
DRAFT**

***Prepared for:***

County of Tulare

***Prepared by:***

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Visalia, California

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**ABBREVIATIONS**

AF.....	Acre-Feet
CDBG.....	Community Development Block Grant
CDPH.....	California Department of Public Health
CEQA.....	California Environmental Quality Act
CFS.....	Cubic Feet per Second
CPUC.....	California Public Utilities Commission
CSA.....	County Service Area
CSD.....	Community Services District
CVP.....	Central Valley Project
CWC.....	California Water Code
CWS.....	Community Water System
DAC.....	Disadvantaged Community
DBCP.....	Dibromochloropropane
DWR.....	Department of Water Resources
DWSAP.....	Drinking Water Source Assessment & Protection
EPA.....	United States Environmental Protection Agency
FEMA.....	Federal Emergency Management Agency
GIS.....	Geographic Information Systems
IRWM.....	Integrated Regional Water Management
JPA.....	Joint Powers Authority
LAFCO.....	Local Agency Formation Commission
LPA.....	Local Primacy Agency
MCL.....	Maximum Contaminant Level
MHI.....	Median Household Income
MOU.....	Memorandum of Understanding
MSR.....	Municipal Service Review
NCWS.....	Non-Community Water System
NTNC.....	Non-Transient Non-Community Water System
PPM.....	Parts Per Million

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PPSAG.....	Pilot Project Stakeholder Advisory Groups
PUC.....	Public Utilities Commission
PUD.....	Public Utility District
PWS.....	Public Water System
RCAC.....	Rural Community Assistance Corporation
RMA.....	Resource Management Agency
RWQCB.....	Regional Water Quality Control Board
SB.....	Senate Bill
SDAC.....	Severely Disadvantaged Community
SDWA.....	Safe Drinking Water Act
SOAC.....	Stakeholder Oversight Advisory Committee
SRF.....	State Revolving Fund (Safe Drinking Water)
SSWS.....	State Small Water System
SWP.....	State Water Project
SWRCB.....	State Water Resources Control Board
SWS.....	Small Water System
TLB.....	Tulare Lake Basin
TMF.....	Technical Managerial & Financial
TNC.....	Transient Non-Community Water System
USDA.....	United States Department of Agriculture
WDR.....	Waste Discharge Requirements

## EXECUTIVE SUMMARY

[Text here]

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## 1 INTRODUCTION

Approximately 370 of 533 identified small communities within the Tulare Lake Basin are disadvantaged or severely disadvantaged. The estimated population within these 370 communities is about 284,000. The water and sewer systems in these unincorporated communities throughout the Tulare Lake Basin vary in size, from those with individual water wells and onsite septic tank systems, to community systems serving more than 2,000 connections. The vast majority of the communities (approximately 84%) range in size from 15 to 200 connections, although a larger percentage of the overall population lives in communities with greater than 200 connections. The number of connections as discussed in this pilot study is generally based on water system connections, since only about ten percent of the DACs in the Study Area have wastewater collection and treatment systems.

These communities suffer from a variety of source water issues, including insufficient supply and poor water quality. A water quality issue, as defined in this report, is considered to be a single primary maximum contaminant level (MCL) exceedance within the three year period from 2008 through 2010. This does not necessarily constitute a violation, but is an indication that the system needs to be further evaluated. Exceedance of maximum contaminant levels for arsenic, nitrates, and uranium are common in the Tulare Lake Basin region (study area), as shown in **Table A-1** in **Appendix A**. Insufficient water supply, as discussed in this report, is considered to be a water system with only one (1) active water supply well. Communities with surface water as their single source of supply can also be vulnerable depending on the reliability of the surface water source and backup systems integrated into the water treatment plant.

Many disadvantaged communities with water supply or water quality issues have applied for and received funding for improvements to mitigate their water supply and/or water quality problems. **Table A-2** in **Appendix A** presents a listing of some recently funded projects. Systems that have received funding for water system improvements are usually on their way to resolving their water supply issues. While there are cases where the funded improvements resolve some, but not all of the system's water supply issues, a given funded project should be on the path toward the goal of delivering safe and sufficient potable water for a water system. Some communities lack the technical, managerial and financial (TMF) abilities to operate and maintain a new system or upgraded system, and, as such, may not be eligible to receive funding for construction. In these situations, a treatment solution or new water source solution may not be feasible without addressing ongoing expenses and TMF issues. This pilot report aims to identify various management and non-infrastructure solutions that can be considered which may alleviate some of the ongoing problems. It should also be noted that these management and non-infrastructure solutions can be implemented to improve system efficiency and affordability, regardless of whether a water supply or quality issue exists, and regardless of whether an upgrade to the system is needed.

In addition to the source water issues faced by DACs in the Study Area, many communities also face issues with their wastewater. Wastewater challenges include

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reliance on septic systems that may be failing or potentially contaminating the groundwater, failing or insufficient sewer collection systems, or wastewater treatment systems that are not capable of meeting the limitations set forth in the facility's Waste Discharge Requirements (WDRs). Wastewater treatment technologies are discussed in the Technical Solutions Pilot Project, and individual septic system considerations are addressed in the Individual Households Pilot Project. However, several of the management and non-infrastructure solutions presented in this report could benefit both water and wastewater systems. In fact those communities that have one of either a community water or wastewater system could potentially benefit by the increased number of services provided through both water and wastewater service, which would provide a better economy of scale.

The management and non-infrastructure solutions that will be presented in this pilot report include:

- Internal Changes
- Informal Cooperation
- Contractual Assistance
- Inter-Agency Contracts
- Ownership Transfer
- County Operation of Multiple Zones of Benefit of County Service Areas
- Regional Association Focusing on Sharing of Information
- One or More Combinations of Solutions

Internal changes are the modifications that can be made within an entity to reduce costs, improve service delivery, and/or improve efficiency. Some of the internal changes that may be considered include: installation of water meters on services to encourage water conservation; assessing the existing rate structure to determine if adjustments to the rate structure are appropriate; assessing the existing budget, financials, and reserves to determine if adjustments are necessary; and evaluating the existing management structure to see if changes to the structure may benefit the sustainability of the entity.

Informal cooperation can involve two or more entities working together in a mutual aid arrangement, without contractual obligations. By sharing equipment, bulk supply purchases, backup operation and maintenance personnel, sampling and testing services, billing services, or similar items or services, the cooperating communities can reduce some of their individual expenses without the need for a formal agreement.

Contractual assistance can be provided in various forms. An entity or group of entities can contract with a private third party entity to provide bookkeeping services, operation and maintenance services, management, engineering, or other services. This type of contract is under each individual system's control, and does not necessarily involve

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cooperation between two systems. Similarly, an entity can contract with a non-profit corporation to provide any of a variety of services. This can involve an existing non-profit entity or one formed for the specific purpose of contracting service, which will offer goods or services to public or private water or sewer service entities. Alternatively, the contractual assistance can be between service suppliers. In this case, an entity could enter into one or more contracts with other entities for the provision of services and/or the purchasing of goods and equipment. There are various options with each of these types of contractual assistance, as will be discussed in this report.

Inter-agency contracts can involve the creation of a new entity by several existing entities, which allow each system to continue to exist as independent entities. Inter-agency contracts are most likely be in the form of a Joint Powers Agreement that can form a Joint Powers Authority (JPA); however JPAs are generally restricted to public entities. The new entity formed through the inter-agency contract provides one or more services for all participating entities; however the remaining services of each entity remain the responsibility of the individual system. For example, the JPA may provide shared system management structure, while each participating entity continues to operate its own system.

Ownership transfer involves full consolidation of two or more systems into one existing or newly created system. This solution also has various options, including: acquisition and physical interconnection between the systems; or acquisition and satellite management (no physical interconnection). This report will discuss both forms of consolidation; however this study will focus on the governance structure and the physical interconnection will be discussed further in the New Sources pilot study.

County operation of multiple zones of benefit or County Service Areas is another type of solution. A solution may be to utilize County staff to provide various services within multiple zones of benefit or county service areas. Many counties already manage County Service Areas (CSA) within their respective county. If a county has an efficient model in place to operate these service areas, and is willing to expand their services, they could potentially take in additional unincorporated communities.

Regional association focusing on sharing information can support and augment other solutions. The regional association would be a voluntary, independent association whose main objective would be to act as a clearinghouse of information, materials, and resources to those entities that choose to be a part of the association. Existing entities can continue to exist and function independently. Community members and entity leaders, staff and other interested parties can be potential members of this regional association.

Any one or a combination of two or more of the solutions discussed here can be implemented. Each community is different, and therefore the most appropriate or most beneficial solution or solution set will differ from system to system. This report does not aim to recommend a single specific solution, but rather it will present various potential solutions from which a community or group of communities can select, based on what

may be most appropriate for their specific circumstances, needs, and political, practical, and financial demands.

This report describes potential alternative management and non-infrastructure solutions, the implementation process for each solution, as well as several example projects that have been implemented, demonstrating the result of these solutions. Some potential projects or regions within the Tulare Lake Basin study area are also identified, for which further vetting and evaluation will be required. Additionally, this report discusses funding opportunities, the sustainability of the solutions identified, operation and maintenance impacts associated with implementation of the solutions, as well as obstacles and barriers that need to be overcome to implement these solutions.

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## 2 BACKGROUND

The Safe Drinking Water Act was originally passed by Congress in 1974 and amended in 1986 and 1996, to protect public health by regulating the nation's public drinking water supply. The Safe Drinking Water Act affects every public water system (PWS) in the United States. It is noted that any supplier delivering water for human consumption to less than 15 service connections or 25 regularly served persons is not considered to be a PWS, as defined by the Safe Drinking Water Act. The key provision of the Safe Drinking Water Act are the National Primary Drinking Water Regulations, which are national health-based standards for drinking water to protect against both naturally occurring and man-made contaminants that may be found in drinking water. Early on, the Safe Drinking Water Act primarily focused on treatment as a means of protecting drinking water, but in 1996 the Act was amended to include source water protection, operator training, funding for water system improvements, and public information as important components of protection.

Compliance with the Safe Drinking Water Act at the federal and state levels requires public water systems, regardless of size, to have (1) adequate and reliable sources of water that either are or can be made safe for human consumption; and (2) the financial resources and technical ability to provide services effectively, reliably, and safely for workers, customers, and the environment. Small public water systems must meet the same requirements as larger utilities, but with fewer financial resources available to them due to their smaller customer base. The ability of users to cover system costs is further reduced in disadvantaged communities where household incomes are extremely limited, resulting in an increased challenge in meeting the financial resources requirement. Federal and state programs do provide these small public water systems with extra assistance, such as training and technical assistance, but operational subsidies are almost nonexistent and many small and disadvantaged community water systems continue to struggle to remain in compliance.

### 2.1 Water Quality and Supply Issues

There are approximately 370 disadvantaged communities (DACs) within the Tulare Lake Basin study area. Of these 370 DACs, approximately 206 are severely disadvantaged communities (SDACs). The water systems within these communities face challenges related to the quality of their water and/or the number of supply sources available. The water quality primary MCL exceedances reported include coliform bacteria, arsenic, nitrate, uranium, fluoride, DBCP, perchlorate, PCB, and disinfection by-products such as trihalomethanes. Based on the database information collected and analyzed, arsenic, nitrate, and uranium are the contaminants of greatest concern in the region. Coliform exceedances are also common, but coliform is readily treatable as discussed and documented in the Technical Solutions pilot study. Management and non-infrastructure issues do not have as direct an impact on coliform bacteria contamination.

Approximately 117 out of the 370 DACs in the region reported at least one water quality exceedance between 2008 and 2010. A breakdown of the water quality exceedances by contaminant is presented in the Technical Solutions Pilot Study. Limited reliable water supply is also a concern within the region, since many communities only have a single source of water supply, usually from groundwater. The communities with the various water supply and quality issues are illustrated on the maps shown as **Figures B-5 through B-8**, included in **Appendix B**.

Information that was prepared or provided by others was relied on to develop and analyze the types of problems and non-compliance that exist, as well as develop potential solutions. The database is a collection of data from PolicyLink, CDPH, Self Help Enterprises, County of Fresno, and County of Tulare, [other], which has been reviewed to evaluate the pollutant water quality and supply source issues in the Study Area. This is the best available data, but it is not a complete and comprehensive database of all water supply systems in the Study Area, and as such should be considered a work in progress for future updating. It is likely that there are systems with water quality problems that have not been specifically identified because water quality data for those systems are sometimes in individual reports and are difficult to track. Very small water systems (15 connections and less) are likely to have the most limitations in data availability. Their problem types, however, are going to be within the family of problems identified to exist for other communities in the database.

## 2.2 Definitions of Water Systems

The following are definitions from Title 22 California Code of Regulations, related to various categories of water systems. The emphasis of this study is on small water systems, state small water systems, and community water systems. Non-community water systems, non-transient non-community water systems, and transient non-community water systems do exist within the study area, but are not a focus of this pilot study.

Small Water System (SWS): A community water system, except those serving 200 or more service connections, or any non-community or non-transient non-community water system.

State Small Water System (SSWS): A system for the provision of piped water to the public for human consumption that serves at least five, but not more than 14, service connections and does not regularly serve drinking water to more than an average of 25 individuals daily for more than 60 days out of the year.

Public Water System (PWS): A system for the provision of water for human consumption through pipes or other constructed conveyances that has 15 or more service connections or regularly serves at least 25 individuals daily at least 60 days out of the year.

Community Water System (CWS): A public water system that serves at least 15 service connections used by yearlong residents or regularly serves at least 25 year long residents of the area served by the system.

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Non-Community Water System (NCWS): A public water system that is not a community water system.

Non-Transient Non-Community Water System (NTNC): A public water system that is not a community water system and that regularly serves at least 25 of the same persons over 6 months per year.

Transient Non-Community Water System (TNC): A non-community water system that does not regularly serve at least 25 of the same persons over six months per year.

**Figure 1** (below) presents a decision tree, published by the California Department of Public Health, illustrating the classification of water systems.

It is noted that the U.S. Environmental Protection Agency (EPA) uses a different definition for small public water systems as follows: Public water systems with fewer than 1,000 service connections and a population served of less than 3,300.

### 2.3 Other Definitions

Disadvantaged Community (DAC): A community whose median household income is 80 percent or less of the statewide median household income.

Severely Disadvantaged Community (SDAC): A community whose median household income is 60 percent or less of the statewide median household income.

Types of organizations include:

- Community Services District (CSD): A community services district is an entity formed by residents of an unincorporated community, which is authorized to provide a wide variety of services, including water, garbage collection, wastewater management, security, fire protection, public recreation, street lighting, ambulance services, and graffiti abatement. A CSD may span unincorporated areas of multiple cities and/or counties. A CSD may form bonds, or form an improvement district for the purpose of issuing bonds, as any City or County might do. Any bond issuance or other long-term debt will require a 2/3rds majority approval of registered voters residing within the CSD.
- Mutual Water Company (MWC): A privately owned, public utility, regulated by the California Public Utilities Commission (CPUC).
- Public Utility District (PUD): A special-purpose district that provides public utility service, such as electricity, natural gas, wastewater collection/management, wastewater treatment, telecommunications, and/or water, to residents of the district.
- Water District (WD): [define]
- Others??

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Proposition 218: Proposition 218, officially titled the “Right to Vote on Taxes Act”, was approved by California voters in 1996. It established additional substantive and procedural requirements and limitations on new and increased taxes, assessments, and property related fees and charges. When referred to in this Report, Proposition 218 refers to the requirements associated with changes to fees and charges imposed by an agency for water or sewer service (water/sewer rates). Prior to adopting or increasing a property-related fee or charge subject to Proposition 218 (water or sewer rate increase), the agency must conduct a public hearing at which property owners can protest the rate increase. The hearing must be held at least 45 days after the mailing of the notice of the proposed fee or change to record property owners. At the hearing, the agency must consider all protests against the proposed fee or charge; however, when evaluating whether the number of protests defeats the imposition or increase of the fee or charge, only written protests are counted. “If written protests against the proposed fee or charge are presented by a majority of owners of the identified parcels, the agency shall not impose the fee or charge.” (California Constitution, Article XIID, § 6, Subdivision (a), Part (2).) If a majority of owners do not submit a written protest, the fee or charge proposed can be imposed.

Non-Profit or Not-for-Profit: An entity that is exempt from taxes under United States Internal Revenue Code Section 501(c), 26 U.S.C. 501(c).

Operator Certification Levels (Distribution System Operators: D1-D5; Treatment Plant Operators: T1-T5)

Operator certification helps protect human health and the environment by establishing minimum professional standards for the operation and maintenance of public water systems. In 1999, EPA issued operator certification program guidelines specifying minimum standards for certification and recertification of the operators of community and non-transient non-community public water systems. These guidelines are implemented through State operator certification programs.

The California Regulations Related to Drinking Water, Title 22 Code of Regulations, Chapter 15 Domestic Water Quality and Monitoring Regulations, Article 2 General Requirements describes the classification of water treatment facilities and distribution systems.

Water treatment facilities are classified pursuant to Table 64412.1-A of the California Code of Regulations.

**Table 2-1. California Code of Regulations Table 64413.1-A - Water Treatment Facility Class Designations**

<i>Total Points</i>	<i>Class</i>
Less than 20	T1
20 through 39	T2

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40 through 59	T3
60 through 79	T4
80 or more	T5

The calculation of total points for a water treatment facility is described in the California Code of Regulations, and depends on the water source, water quality, and treatment method.

Distribution systems are classified pursuant to Table 64413.3-A of the California Code of Regulations.

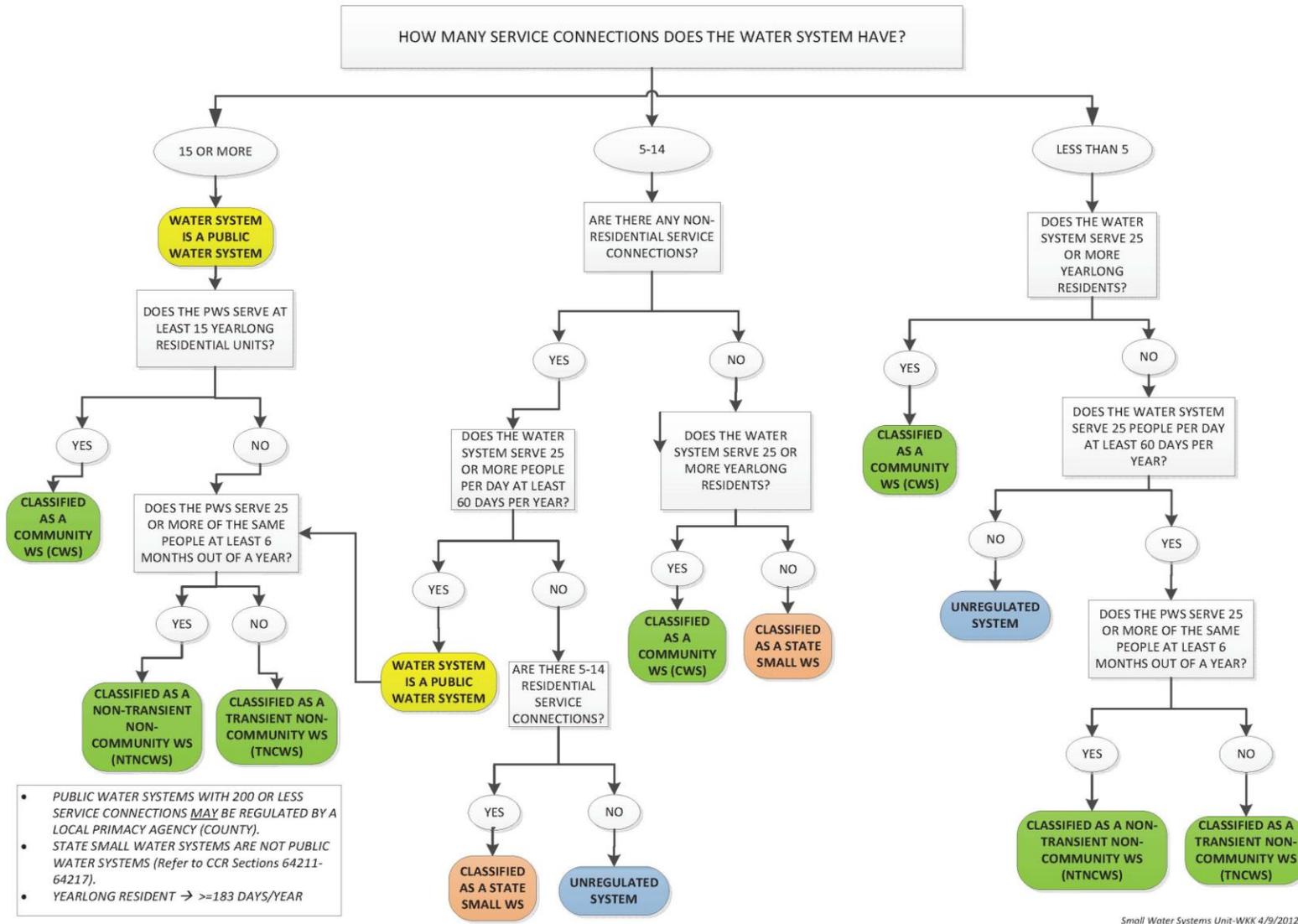
**Table 2-2. California Code of Regulations Table 64413.3-A - Distribution System Classifications**

<i>Population Served</i>	<i>Class</i>
1,000 or less	D1
1,001 through 10,000	D2
10,001 through 50,000	D3
50,001 through 5 million	D4
Greater than 5 million	D5

SECTION TWO

Figure 1. Decision Tree for Classification of Water Systems (CDPH)

**DECISION TREE FOR CLASSIFICATION OF WATER SYSTEMS**



Small Water Systems Unit-WKK 4/9/2012

## 3 DESCRIPTION OF PROBLEM

### 3.1 SOAC Defined Issues

Several priority issues were developed during the Stakeholder Oversight Advisory Committee (SOAC) process. The stakeholder process is discussed in detail in the Final Report. The specific priority issues that the Management and Non-Infrastructure Solutions pilot study aims to address include the following:

- Lack of Funding to Offset Increasingly Expensive Operations and Maintenance Costs in Large Part Due to Lack of Economies of Scale
  - Small systems serving primarily low-income households and remote locations cannot keep rates affordable and still generate enough revenue to run the system safely over the long term;
  - Lack of funding resources to operate and maintain water or wastewater systems at affordable levels and lack of funding for planning and replacement of infrastructure as it ages.
- Lack of Technical, Managerial and Financial (TMF) Capacity by Water and Wastewater Providers
  - Lack of adequately trained technical, legal, financial, and managerial professionals, as well as inadequate training and ongoing education and assistance for existing water and wastewater providers;
  - Lack of knowledge of available training, assistance, and educational opportunities to help local employment in these sectors.

### 3.2 Community Characteristics

The Management and Non-Infrastructure Solutions Pilot Project documents organizational issues with small communities and delivery of water and sewer services to the residents of those communities. Water systems are emphasized in this report, but all of the solution sets discussed are applicable for either or both water and sewer systems. Communities are grouped by size as follows: 50 connections or less, 51 to 200 connections, 201 to 500 connections, 501 to 2,000 connections, and greater than 2,000 connections. These ranges were chosen to look for operational correlation that might be dependent on community size. This section includes general assumptions related to communities of various sizes. **Table 3-1** summarizes the number of communities in each size range. A summary of community characteristics for a representative selection of the communities studied is presented in **Table 3-2**. A complete listing of the communities studied is presented in **Table A-1**, included in **Appendix A**, and community profile descriptions are provided in **Appendix C**.

SECTION THREE

Table 3-1. Community Size Ranges

Community Size Range (connections)	Number of Communities		Number of Connections		Population	
	Total	Public	Total	Public	Total	Public
50 or Fewer	209	7	4,533	213	15,358	869
51 through 200	92	12	9,111	1,387	28,757	4,493
201 through 500	33	16	10,633	5,245	31,293	18,218
501 through 2,000	29	18	29,232	16,415	88,302	55,738
Greater than 2,000	7	5	37,068	24,255	120,669	78,671
Total	370	58	90,577	47,515	284,379	157,989

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Table 3-2. Summary of Community Characteristics

Name of Community	County	Type of Organization (water/sewer)	Population	Number of Connections	Water Source (GW/SW)	Source Water Issue <sup>1</sup>	Community Water Monthly Rate (Average Rate <sup>2</sup> )	Community Sewer (Y/N) Monthly Rate	Median Household Annual Income (DAC/SDAC)
50 or Fewer Connections									
Camden Trailer Park?	Fresno	Private	100	25	GW				\$25,982 (SDAC)
Double L MHP?	Fresno	Private	80	37	GW				\$27,895 (SDAC)
El Porvenir?	Fresno	Public							
Cantua Creek?	Fresno	Public							
Kelso or Mettler ?	Kern								
Crider	Kern	Private		12	GW			N	
Hardwick MWC <sup>3</sup>	Kings	Private	140	20	GW		\$40.00	N	??
Lemoore MHP	Kings	Private		38	GW				\$37,303 (DAC)
Akin	Tulare	Private	85	26	GW		\$30.00	N	\$33,375 (SDAC)
Lemon Cove Sanitary District	Tulare	Public	308	XX	GW				\$41,705 (DAC)
51 to 200 Connections									
Lanare -Receivership	Fresno	Private	600	169	GW				\$26,375 (SDAC)
Las Deltas (just outside TLB)	Fresno	Private			GW				
Raisin City CSA?	Fresno	Public	350	60	GW			N	\$24,167 (SDAC)
Athal	Kern	Private	150	62	GW			N	\$27,465 (SDAC)
Lost Hills	Kern	Public	1991	434					\$31,875 (DAC)
	Kings								
	Kings								
Allensworth CSD	Tulare	Public	471	119	GW		\$42.00	N	\$22,625 (SDAC)
Delft Colony (Tulare Co. RMA)	Tulare	Public	454	102	GW		\$45.75	\$49.00	
East Orosi CSD	Tulare	Public	495	1xx	GW		\$17.00	\$50.00	\$29,063 (SDAC)
Sultana CSD	Tulare	Public	775	156	GW				\$44,250 (DAC)
Teviston CSD	Tulare	Public	1,214	1xx	GW		\$55.00	N	\$23,050 (SDAC)
Tooleville MWC (w) Tulare Co. RMA (s)	Tulare	Private (w) Public (s)	339	76	GW		\$40.00	\$59.25	\$17,118 (SDAC)
Tract 92 CSD	Tulare	Public		xx	GW			N	\$32,400 (DAC)
West Goshen MWC	Tulare	Private	511	101	GW		\$50.00	N	\$41,250 (DAC)
Yettem (Tulare Co. RMA)	Tulare	Public	350	64	GW		\$56.00	Y	\$31,736 (DAC)
201 to 500 Connections									
Biola CSD	Fresno	Public	749	206	GW				\$32,667 (DAC)
Del Rey CSD?	Fresno	Public	950	240	GW				\$26,458 (SDAC)
Laton CSD	Fresno	Public	1236	331	GW				\$35,408 (DAC)
Buttonwillow CWD	Kern	Public	1266	472	GW				\$28,370 (SDAC)
	Kern								

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Kettleman City CSD	Kings	Public	1,439	366	GW		\$30.05	\$24.00	\$25,988 (SDAC)
Stratford?	Kings	Public	1,215	240	GW				\$29,205 (DAC)
Home Garden?	Kings	Public	1750	450	GW				\$25,450 (SDAC)
Alpaugh CSD	Tulare	Public	1,026	360	GW		\$55.00	N	\$24,688 (SDAC)
London CSD	Tulare	Public	1,869	420	GW				\$29,853 (SDAC)
Matheny Tract MWC	Tulare	Private	1200	276	GW		\$40.00 (\$45 summer)	N	\$34,826 (DAC)
Plainview MWC	Tulare	Private	945	240	GW		\$35.00	N	\$15,500 (SDAC)
Traver (Tulare Co. RMA)	Tulare	Public	713	186				\$33.75	
501 to 2000 Connections									
Caruthers CSD	Fresno	Public	2103	672	GW				\$29,750 (SDAC)
Riverdale PUD	Fresno	Public	3000	930	GW				\$29,886 (DAC)
	Kern								
	Kern								
Armona CSD	Kings	Public	3239	1179	GW				\$32,790 (DAC)
	Kings								
Pixley PUD	Tulare	Public	3,310	800	GW		\$29.00	\$36.55	\$35,759 (DAC)
Richgrove CSD	Tulare	Public	2,882	600	GW				\$28,261 (SDAC)
Greater than 2000 Connections									
	Fresno								
	Fresno								
Lamont PUD	Kern	Public	15,120	3,500	GW				\$33,799 (SDAC)
East Niles CSD?	Kern	Public	24900	7338					
	Kings	No unincorporated communities exist in Kings County with more than 2,000 connections							
	Tulare	No unincorporated communities exist in Tulare County with more than 2,000 connections							

1. Source water issues are defined as the following:

- a. **S** = Single Source of Supply
- b. **A** = Arsenic MCL exceedance
- c. **N** = Nitrate MCL exceedance
- d. **U** = Uranium MCL exceedance
- e. **O** = Other MCL exceedance
- f. **X** = No current water supply or quality issue

2. Approximate average water rates are used as a basis of comparison, since communities have differing rate structures.

3. Hardwick MWC serves approximately 20 connections. The other 20+ homes and businesses in Hardwick are served by private wells.

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**3.2.1 Communities with 50 or Fewer Connections**

The majority of communities in the Study Area with fewer than 50 connections have private water systems (approximately 97%). Water systems of fewer than 15 connections are all private (within the Tulare Lake Basin Study Area), and are usually run by one individual, often the property owner, with minor maintenance done by the property owner. When there is a major maintenance issue that needs to be addressed, the responsible owner of the system will often call whoever they know who can fix the problem, sometimes a qualified contractor, but not necessarily. Experience has generally shown that systems of 6 connections or less tend to be able to work out issues between neighbors as problems arise. Systems between 7 and 15 connections tend to have more difficulty resolving issues because consensus is harder to reach as the group gets larger. General operations are commonly carried out by unpaid volunteers.

Typically for these very small systems, the system owner collects money for expenses. Engineers and legal representatives rarely get involved. If they do, there may be a critical issue to resolve and the system may be in crisis mode. Many of these small entities are very difficult to operate on a sustainable basis. It is difficult for these small entities to budget even for basic expenses, including insurance which can protect the owner(s) from liabilities, and it can be virtually impossible for them to budget sufficient funds to cope with large-scale emergencies or capital improvements.

Systems of 15 connections or more are considered by CDPH as Community Water Systems (CWS), and are regulated either by CDPH or the Local Primacy Agency (LPA). CWSs with less than about 50 connections are still limited due to lack of resources and economies of scale. As with the very small systems (14 connections or less), there is often a need for volunteerism to keep the system running and rates as affordable as possible.

The presence of volunteerism can lead to the perception that systems of this size can be viable from a water rate perspective, but that may be misleading since having a volunteer manage or operate the system is cannot be relied on as a repeatable model. Some systems do, however, operate this way successfully for many years.

**3.2.2 Communities with Between 51 and 200 Connections**

The EPA has designated CDPH as the Primacy Agency responsible for the administration and enforcement of the Safe Drinking Water Act (SDWA) requirements in California. CDPH has adopted statutes and regulations to implement the requirements of the SDWA. CDPH has regulatory responsibility over water systems including tasks such as issuance of operating permits, conducting inspections, monitoring for compliance with regulations and taking enforcement action to compel compliance when violations are identified.

CDPH has delegated the drinking water program regulatory authority for small public water systems serving less than 200 service connections to 35 counties in California.

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The delegated counties (Local Primacy Agencies or LPAs) are responsible for regulating approximately 4,000 small public water systems statewide. CDPH retains the regulatory authority over water systems serving 200 or more service connections and any small water systems not delegated to an LPA.

Tulare County and Kings County are the Local Primacy Agencies under the State Department of Public Health in monitoring compliance for and in enforcing EPA's Safe Drinking Water Act in those counties. Communities in Tulare County with less than 200 connections are therefore monitored by the Tulare County Health & Human Services Agency, Environmental Health Division. In Kings County the County Department of Public Health Environmental Health Services Division provides this service.

In Fresno and Kern Counties, CDPH maintains responsibility for regulating small public water systems.

Most of the systems under 200 connections are currently unmetered. Many small DACs in the Tulare Lake Basin have user rates over the affordability criteria of 1.5% of median household income, often because the community systems lack economies of scale, yet these small systems must meet the same regulatory requirements of much larger systems.

Systems at the lower end of this size range may still rely on volunteerism, but systems closer to 150 or 200 connections typically have at least a part-time office person to perform administrative tasks and a contract or part-time D1 Distribution Operator, or possibly a T1 Treatment Plant Operator (See Section 2.3 for operator classifications).

Systems in this size range tend to have a better ability to acquire resources, but they still face challenges related to customer affordability and insufficient economies of scale. In order to be sustained long term, a system should generate more revenue than the short term on-going expenses with surpluses placed into a reserve account to cover future emergencies, increases in operational expenses, debt service (if a loan is being repaid) and future system replacement costs. In the TLB, many small systems are fortunate if they even have a savings account in addition to one general checking account.

Another measure of the health of the water system purveyor is how the water system is operating. Does the responsible party (owner/board of directors) adopt annual budgets and set rates based on those budgets? Is the system operating in the black? If there is a board and does it meet on a regular basis? Does the board operate according to its bylaws or as per state statutes? All of these factors are important regardless of the size of the system. Generally, the smaller the system, the more difficult it is to meet these requirements. That said, there exist some very well-run small water systems.

### 3.2.3 Communities with Between 201 and 500 Connections

Systems with between 201 and 500 connections are usually more viable than the smaller systems described above. Some systems of this size can be sustained at a higher level of operation, and may even have a full time manager. They may also have

part or full-time maintenance personnel and some office staff. Operators can be contracted or in-house staff.

The Upper Kings DAC study identifies an approximate efficiency level, where, based on the data available, it appears that a system becomes more viable, rates stabilize, and the system is able to run more efficiently. The Upper Kings DAC study suggests this level may be at approximately 500 connections. The analysis is highly dependent on the level of volunteerism available and utilized, operations costs specific to each water system (e.g. if treatment is required, costs will be higher than if there is no treatment), source of water supply (groundwater versus surface water), and other variances between communities. It is not possible to realistically prescribe a number of connections at which a system becomes “efficient”, but more connections yields greater economies of scale, which is beneficial, regardless of the circumstances specific to a given community or system. While the size at which a system realizes the benefits of economies of scale cannot clearly be defined, a system with greater than 200 connections can most often be sustainable.

#### 3.2.4 Communities with Between 501 and 2,000 Connections

Systems with between 501 and 2,000 connections are typically sustainable and self-reliant, and they tend to have the resources to deal with emergencies situations. Typically systems of this size will have a full time manager, full time maintenance personnel, and a bookkeeper. Full time operators can be contracted or on staff. Systems in this category can become part of the solution for surrounding communities.

#### 3.2.5 Communities with Greater than 2,000 Connections

Unincorporated communities with more than 2,000 connections are similar to small cities in the San Joaquin Valley. There are approximately six (6) communities of this size within the study area, all of which are in Kern County. Any system, no matter the size, will have ongoing challenges. However, communities of this size are able to utilize the economies of scale available with the increased population and are able sustain full services on an ongoing basis. These communities are generally able to sustain themselves and have potential for regional solutions.

One of the challenges faced by communities of this size is retention of staff. As with small cities, qualified personnel are often trained in a small community organization and then move on to larger organizations where there are more opportunities.

## 4 DESCRIPTION OF SOLUTIONS

Four potential solutions were identified to be analyzed through the pilot projects. This section focuses on management and non-infrastructure solutions to reduce costs and improve efficiency. This section will describe the solutions recommended as part of the Management and Non-Infrastructure Solutions pilot study.

### 4.1 Range of Potential Solutions

The Management and Non-Infrastructure Pilot Project includes solutions ranging from sharing of resources on a small scale, such as sharing of personnel or purchasing pools, increasing to larger scale governance approaches and full organizational consolidation. Various potential solutions include:

- Shared purchasing – Such as pooled purchasing of vehicle and shared use of vehicles (pickup trucks, small dump trucks, backhoes, etc.), chemical supplies and operational and testing equipment, spare parts for repair and maintenance of well sites and distribution system components.
- Pooled insurance – small systems often have no insurance, groups of small communities could pool together to get more affordable insurance.
- Use of same auditing, engineering, legal, financial/bookkeeping, TMF, or other professional services firms in a coordinated basis. For instance combining efforts in acquiring engineering or legal services that are common among communities.
- Use of and coordination with the same contract water and wastewater operators between communities.
- Association formation to provide ongoing support to water/wastewater system operators within the Tulare Lake Basin region (or encourage utilization of existing associations).
- Shared management – opportunities for adjacent or close-by operations to share management functions – coordinating board meetings, assigning daily operational tasks, cash flow/billing function, planning for present and future needs, hiring contractors, evaluating employees, etc. (JPA)
- Shared equipment such as mentioned in shared purchases above or sharing equipment where one entity purchases the backhoe and another entity supplies a sewer cleaning vacuum truck.
- Backup of maintenance/operator personnel.
- Various governance approaches (JPA, non-profit, county structures, CSDs, PUDs, MWCs (private), other private entities that report to PUC).

A system partnership may be two or more systems working together to overcome challenges and build capacity to create a mutually beneficial situation for all systems involved. There is a range of levels of collaboration between systems than can be implemented. **Table 4-1**, developed from the webinar ‘Partnering Over Time’ (EPA, 2011), illustrates a broad spectrum of partnership solutions. On the far left, there is

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informal cooperation, such as operator-to-operator mentoring, or sharing equipment. Next, there is contractual assistance, such as contracting operations or management services. Next are inter-agency contracts, such as a joint powers authority, which is where systems can get together and form a new entity to share management or operators. Finally, there is complete ownership transfer. This can sometimes involve physical consolidation of the systems, but physical connection is not required. This report will discuss consolidation in terms of ownership transfer, both for systems that physically connect and those that do not. This study focuses on the governance changes associated with consolidation, while the physical interconnection will be discussed further in the New Sources Pilot Study.

Table 4-1. Spectrum of Partnership Solutions (EPA, 2011)

→ Increasing Transfer of Responsibility →			
Informal Cooperation	Contractual Assistance	Joint Powers Authority	Ownership Transfer
Work with other systems, but without contractual obligations	Requires a contract, but contract is under system's control	Creation of a new entity by several systems that continue to exist as independent entities (e.g. regional water system)	Takeover by existing or newly created entity
<b>Examples:</b>	<b>Examples:</b>	<b>Examples:</b>	<b>Examples:</b>
Sharing equipment	Contracting operation and management	Sharing system management	Acquisition and physical interconnection
Sharing bulk supply purchases	Outsourcing engineering services	Sharing operators	Acquisition and satellite management
Mutual aid arrangement	Purchasing water	Sharing source water	One system transferring ownership to another to become a larger existing system or entity

4.2 Types of Solutions

This section presents solutions from the internal changes that an individual system can do to achieve and maintain sustainability, to options that include achieving and maintaining sustainability through partnerships and collaboration.

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Regionalization can promote other operational efficiencies such as economies of scale, benefits to employees where benefits may not have been provided before, and many other benefits associated with developing a larger entity.

**4.2.1 Internal Changes**

Various changes within an individual system can be implemented to reduce costs, improve efficiency, and assess whether technical, managerial, and financial (TMF) capacity can be improved. Internal changes that may be recommended include:

- Install water meters on all services. This will allow for a metered rate structure, which may encourage water conservation and increase revenue from those high use water users.
- Assess the existing rate structure to determine if adjustments to the rate structure can be made to increase revenue and/or encourage water conservation.
- Assess the budget, financials, and reserves. Many communities do not maintain sufficient reserves to be prepared in case of equipment or other failure. It is important to evaluate the budget, and make adjustments as necessary to sustain the system.
- Evaluate the management structure to see if changes may be beneficial to the operations and sustainability of the entity.

**4.2.2 Informal Cooperation**

Informal cooperation would involve two or more entities working with each other in a mutual aid arrangement, but without contractual obligations. Informal cooperation could involve:

- Sharing equipment
- Sharing bulk supply purchases
- Sharing operator and maintenance personnel (backup personnel)
- Coordinating/sharing sampling and testing services
- Sharing of billing and bookkeeping services

**4.2.3 Contractual Assistance**

Contractual assistance could be provided in various different forms. An entity or group of entities could contract with a private third party entity to provide bookkeeping services, operation and maintenance services, management, engineering, or other services. This type of contract would be under each individual system's control, and would not necessarily involve cooperation between two systems. Similarly, an entity could contract with a non-profit corporation to provide any of a variety of services. This could involve an existing non-profit entity or one formed for the specific purpose of contracting service, which would offer goods or services to public or private water or sewer service entities. Alternatively, the contractual assistance could be between service suppliers. In this case, an entity could enter into one or more contracts with

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other entities for the provision of services and/or the purchasing of goods and equipment.

**4.2.3.1 Contract with Private Third Parties**

This option requires a contract, but the contract is under the individual system's control. The contract would be made with a private/outside company. Some examples of this type of contractual assistance may include:

- Contracting bookkeeping/financial services
- Contracting operator services
- Contracting management services
- Contracting engineering services

A group of public and/or private entities could collectively enter into a contract with a private, third party entity, for the provision of goods and/or services at a "group rate". For example, an engineering firm could agree to provide professional services to a consortium of entities under a "master" contract at agreed upon, discounted rates.

This would be one of the least complicated options, as each individual entity could choose to participate as it so desires, on an item by item basis. There would need to be no action taken by the entity, except for the board to authorize participating in the contract.

In the case of a public entity, the statutory provisions relative to hiring the specific service, or purchasing the particular type of goods, would be applicable.

**4.2.3.2 Contract with Non-Profit Corporation**

An existing non-profit entity, or one formed for the specific purpose of contracting services, could offer to contract to provide goods and/or services to public and private entities. It is not unusual for a public entity to create a non-profit corporation for the purpose of providing one or more specific services. For example, cities and housing authorities have created non-profits to develop, build, own and/or operate low- and moderate-income housing. The public entity in turn contracts with the non-profit so that one provides services to the other.

The primary advantage of contracting with a non-profit versus contracting with a private third party entity would be a lower cost of providing service since there is no need for the company to earn a profit.

There are precise legal and procedural steps required to be followed to form the non-profit organization and obtain tax-exempt status from the IRS. The non-profit would have its own board of directors and staff, separate from the contracting entities. The by-laws could be written so that public and/or private entities which create the non-profit can assure themselves that they would have a director's position on the board.

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#### 4.2.3.3 Contract to Share Services and/or Staff

Both public and private entities could choose to enter into one or more contracts with other entities for the provision of services and/or the purchasing of goods and equipment. The process for acquiring such goods and services, and for entering into such contracts would have to follow the requirements of the public entity members (which are generally more restrictive), such as competitive bidding (if required by law).

One entity could agree to provide all or selected specific services to other entities under a contract agreement. Thus, for example, a district with a full time manager could agree to provide managerial services to other entities. Multiple contracts could be developed, each applying to different services. Likewise, an entity with a certain piece of equipment could agree, by contract, to permit other entities to have access to the equipment, and, if so desired, provide an operator for the equipment.

This arrangement has the advantage of being very flexible, since both public and private entities could participate. In addition, different entities could provide different services so that the entity with the best available staff or resources could provide the services of that staff to others. Economies of scale and increased levels of expertise would occur.

To accomplish this result, the board of the participating entities need only agree to enter into a contract for the agreed upon services.

#### 4.2.4 Inter-Agency Contracts

Inter-Agency contracts would allow creation of a new entity by several systems, which would each continue to exist as independent entities. This inter-agency contract may be in the form of a Joint Powers Authority (JPA) to operate the system as one entity, but maintain other independent processes (billings, budget, bookkeeping). The JPA could be formed by two or three entities, or it could be a larger regional authority with a large number of participating entities. JPAs are generally restricted to public entities, although Mutual Water Companies (MWC) can participate.

- Sharing system management
- Sharing operators
- Sharing source water

The model for formation of a JPA already exists among irrigation and water districts in the Central Valley. An example is the Friant Water Authority, a Joint Powers Authority comprised of irrigation and water districts that receive irrigation water from Friant Dam and the Federal Water Project. There is the potential for flexibility with this option, as the member districts can determine which powers and responsibilities to convey to the JPA and which to retain within the individual districts.

Only public entities can become part of a JPA. If a private entity wishes to become a member of a JPA, they would have to convert their existing structure to a public entity [what does this entail?]. The JPA's powers would be contained in an Agreement, and would be limited to those powers common to all members. For example, if only four out

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of the five member districts provide sewer service, sewer service cannot be a function of the JPA.

The governing board of each potential member district of the JPA would have the power and authority to join the JPA without the requirement of an election, although member boards could choose to put an advisory election before their voters.

Each entity joining the JPA would have one member on the JPA board (or perhaps two to three if the number of member entities is small). The JPA could operate all or parts of the infrastructure of the members under a contract. The board of each entity would control the rate setting within their individual boundaries. Formation of a JPA would provide a benefit of economies of size and expertise for those functions performed by the JPA. There should also be added strength and political impact resulting from the JPA representing the cumulative interests of the member districts.

Interested entities would need to meet and direct someone to draft a JPA document. This would be reviewed and discussed by the individual member boards. Eventually, each individual member board would vote on executing the document, joining the JPA, and appointing a representative to the JPA board.

This option exists in various forms within the region and there is a considerable amount of information on the creation, background, and experience of utilizing this type of approach. This option also has the flexibility of crossing county lines.

#### 4.2.5 Ownership Transfer

Ownership transfer would be in the form of full consolidation of two or more systems into one existing or newly created entity. This may include acquisition and physical interconnection (discussed in further detail in the New Sources Pilot), acquisition and satellite management (no physical interconnection), or one system transferring ownership to another to become a larger existing system or entity.

Full consolidation would require separate concurrent elections to merge the various districts. This would require special approval from Local Agency Formation Commission (LAFCO) to permit the creation of “islands” within the larger service area. LAFCO would also have to approve the mergers. In addition, LAFCO may require the expansion of services into areas not currently being served, to compensate for the creation of “islands” that may result from consolidation. There is opportunity for LAFCOs to take a proactive role in facilitating this type of consolidation.

A critical consideration, depending on the arrangement of the ownership transfer and types of entities involved, would be the size and makeup of the new Board for the consolidated entity. If one or more entities consolidate into an existing entity and are subsequently absolved from providing their original services, this may not be a major consideration. However, if several entities consolidate into a new entity or restructured existing entity, the size and makeup of the new Board will be an important consideration, since it is likely each of the current existing entities would want to have a representative on the new Board. The new “super” District may have to create service areas or zones to accommodate the different levels of service and rates.

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Consolidation with a neighboring system that has sufficient and safe water supply can be one of the most effective long-term solutions. Consolidation refers not only to the physical interconnection of water systems, but also the regionalization and restructuring of the two water systems, which may or may not include physical connection. Full consolidation may take years to complete but initial activities could include development of operator agreements that may lead to future consolidation.

Consolidation of smaller community systems into one larger system increases the ratepayer base, makes treatment more affordable, and may also increase management efficiency and oversight of system resources.

There are many potential benefits to consolidation, including the following:

- Increase economies of scale, spreading capital, operation, and maintenance costs over a larger population to lower the per customer base ratepayer costs.
- Increase ability to apply for and obtain funding for capital improvements, including improvements necessary to meet existing water quality requirements.
- Reduce costs associated with equipment, maintenance, billing, and other management issues by sharing resources across communities.
- Increase reliability with respect to number of water sources.
- Improve the ability to access and hire more skilled employees, and provide those employees with full-time work, rather than on-call or part-time work.

There are also some potential obstacles to implementing a partnership solution. Some of the potential obstacles that may be faced include the following:

- Consolidation may result in a perceived loss of identity for a local community. However, it is recommended that community residents weigh the ability to sustain a clean, reliable, and affordable water supply against what may be only a perceived independence or identity.
- Systems that merge or acquire other systems need to make provisions for acquiring assets and liabilities.
- The initial costs associated with holding meetings and discussing partnership solutions, soliciting community involvement, and other associated tasks may be a barrier. Substantial staff time investment may be required of consolidating systems or cities, with little chance of direct compensation for that time.
- Local political barriers can be significant, but as mentioned above, it should be emphasized that cooperation and sharing of resources may allow the communities involved the ability to sustain a clean, reliable, and affordable water supply.
- Management goals of multiple systems may conflict. This will take additional efforts to coordinate and develop a management structure for the consolidated entity.

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**4.2.6 County Operation of Multiple Zones of Benefit or County Service Areas**

There exists a legal question as to how, and even if, existing independent public entities can participate in a County operated zone of benefit or service area, unless it is done under a JPA or by a series of contracts between the individual entities and the County. The advantage would be the utilization of County staff to provide the various services, or to contract out for such services on behalf of the entities participating.

However, such pre-existing entities would have to deal with Proposition 218 requirements (see Section 2.3) on an individual basis and would have to be willing to cede significant local autonomy and powers to the County and the Board of Supervisors. Therefore, each of these multiple zones of benefit and/or service areas would only be able to cover one existing entity unless two or more entities in one such zone or service area were providing identical services. It is possible to have multiple zones within one zone of benefit or service area with each having their own rates and fees based upon separate cost calculations. There could be a basic fee set for all such areas and then add on fees for additional costs required to provide the service in a particular area.

The advantage to this approach is the ability to rely on sustainable County staff that will remain in place long term. The challenge to this approach, however, is finding County staff to do the work. The necessary staffing level is generally not available in the four counties within the TLB. However, this option should be explored further for its ability to sustain services long term.

**4.2.7 Regional Association Focusing on Sharing of Information**

A regional association focusing on sharing information would entail the creation of a voluntary, independent association whose principal goal and objective would be to act as a clearinghouse of information, materials, and resources to those entities that choose to be part of the association. The existing entities would continue to exist and function independently.

For a determined fee, entities could become part of the association and receive information, documents, training, etc. on what is working best among the members. This could be very similar to the existing support entities, such as the League of California Cities, the California State Association of Counties, the California Rural Water Association, etc., but on a regional basis with a focus on the various kinds of services provided by members.

This entity could also serve as a centralized voice for attempting to obtain legislation and/or funding needed to assist the members in the delivery of services. Clearly, this type of entity could cross County lines.

Integrated Regional Water Management (IRWM) groups could also provide the benefits of a regional associating. Integrated Regional Water Management is a collaborative effort to manage all aspects of water resources in a region. IRWM crosses jurisdictional, watershed, and political boundaries. It involves multiple agencies, stakeholders,

individuals, and groups, and attempts to address the issues and differing perspectives of all the entities involved through mutually beneficial solutions. The Department of Water Resources (DWR) offers a number of grant funding opportunities for IRWMs.

#### 4.2.8 One or More Combinations of Solutions

The options that have been presented in this section are not mutually exclusive. Various combinations may prove to be the most beneficial for different entities and circumstances. A regional association could serve as a clearinghouse of information on the other alternatives discussed, providing the pros and cons of each.

Given the significant number and variety of entities in the area, with their divergent circumstances and needs, and the political, financial and practical differences among them, it is not likely that a single alternative is best for all situations, nor is it likely to be adopted by all interested parties. On the other hand, it is evident that there is a very real need to assist existing entities in the delivery of domestic water and wastewater services to their constituents, and one or more of the solutions presented herein can help provide the necessary assistance.

## 5 IMPLEMENTATION PROCESS AND COSTS

### 5.1 Implementation Process

Regional cooperation between public water systems can provide the opportunity for systems to share resources to reduce capital and operating costs, and to mitigate concerns regarding meeting Safe Drinking Water Act requirements. Potential arrangements include improving education and technical assistance available, sharing skilled operators and other personnel, consolidating managerial and billing tasks, sharing centralized treatment systems, and sharing water resources. Regional cooperation can take many forms, ranging from simple cooperative agreements to assist neighboring utilities during times of need, to consolidating into a regional entity created for the purpose of operating a regional water utility.

As is common to most rural water systems, distressed rural economies preclude straight-forward capital-intensive solutions without outside sources of funding. Creative solutions for sharing common functions (billings, operations, etc.) could free up resources for capital investment.

There are several steps that can be taken to develop the regionalization solutions described in this report. The process of regionalizing resources will involve the following steps:

1. Creating a role for a “convener” to lead the implementation of regionalization strategies;
2. Conducting a follow-up study to re-screen identified areas, consolidate selected public water systems, define participant roles and responsibilities, and determine the preliminary engineering and financial feasibility of interconnecting system resources;
3. Incorporating the findings of the feasibility study as part of the regional water plan recommendations;
4. Establish an agreement between the participating systems;
5. Applying for grants and/or loans to fund the regionalization projects; and
6. Implementing regionalization of systems or system resources.

It has been the experience of the Rural Community Assistance Corporation (RCAC) of New Mexico, where many regionalization efforts have been successful, that in most cases, regionalization happens by chance. Most communities are busy dealing with their own issues that they do not realize that other neighboring communities are dealing with the same issues. Sometimes the potential for a regional effort is identified by a funding agency, regulatory agency, or a technical assistance provider. These entities have the ability to see information from more than one community at a time. In most cases, this outside person or agency will plant the seed within the community to begin the process.

## SECTION FIVE

## SOLUTIONS PILOT STUDY

Regional collaboration usually begins with one person. You, the person reading this guide, could be the visionary who will start the process. Every regional project takes a leader who will be willing to look beyond how things have “always been done” and move to do what is best for the local community or group of communities.

The process of implementing one of the management and non-infrastructure solutions is initiated when two or more entities decide to coordinate in an effort to resolve their water system issues, perhaps through the work of this visionary or leader to introduce the concept. The water systems must then identify their needs; these needs may include needing an adequate water supply, meeting regulatory compliance, being able to afford capital improvements, getting volunteers to serve on the board, etc.

### When should regionalization be considered?

When:

- Sustaining aging infrastructure is not feasible
- Meeting drinking water requirements is a challenge
- Drinking water sources are not meeting capacity

The system will then recognize the benefit from sharing of resources to optimize system operation, reduce costs, and maintain compliance with the Safe Drinking Water Act. They can begin a conversation with neighboring systems or they can talk to assistance providers, state agencies, funding agencies, or other technical assistance providers, about helping in facilitating a process to discuss regional collaboration and partnerships.

Once a group of water systems has been identified, the next step is to Call a meeting and discuss the collaboration, agree on common needs among the systems, and then decide on what would be the best collaboration model or the first place to start. At the first meeting, the following questions should be asked:

1. What is motivating the partnering effort?
2. What should the communities make a specific point of doing or not doing in the collaboration process?
3. What are the obstacles to collaboration that have to be overcome?
4. What is at risk by going forward with collaboration?
5. What information is needed in order to work together?
6. What do most people accept about the water situation in the area?
7. When and how often are the participating communities going to meeting, and how are they going to communicate?

Also, begin the collect and share characteristics among the communities involved. Some considerations may include: community size, DAC or SDAC status, relative location to other systems, etc. It could be that a region is made up of similar size communities all with similar issues, or it could be that one or more smaller systems consolidates or partners with a large community or City to take advantage of the

## SECTION FIVE

## SOLUTIONS PILOT STUDY

existing system already in place and economies of scale realized by that larger community. Each regional effort will be unique due to geographical constraints, water quality issues, water sources available, political issues, economic issues, and many other deciding factors. Flow charts showing the selection and implementation process are presented in **Appendix D**.

Once the communities decide to move forward, then it shall be discussed what the best partnering options are for the specific collaboration being considered. It may begin with some internal changes, or that all communities involved may internally review its management and financial practices before implementing a partnership approach.

Several levels of change are discussed below. These are ordered from the least to most effort toward change in organizational structure and involvement with outside entities.

#### 5.1.1 Internal Changes

There are internal changes that can be made to improve the viability of a system without implementing a partnership solution. Some of these changes include installing meters to improve efficiency, changing the billing system, or reviewing and modifying the rate structure as appropriate.

Internal changes can be implemented by the owning/governing entity. If the internal changes dictate a change in rates, public entities must go through a Proposition 218 process. The governance structure and decision-making would remain unchanged.

The process to implement internal changes would depend on the changes to be made, and whether funding is available. There would likely be some staff costs and consultant fees associated with the changes, but would not be anticipated to be a major capital cost, except in the case of installing meters or similar physical improvements. If implemented correctly, these internal changes should reduce ongoing costs. Examples include: xxxxxxxxxx

#### 5.1.2 Informal Cooperation

Informal cooperation is the start of developing a working relationship, which may or may not lead more formal cooperation or ownership transfer. Informal cooperation may include working together to buy bulk items, share backup operations, share equipment and other resources, and potentially seek funding together.

Informal cooperation requires no contracting of services and so each entity can still operate independently. Informal cooperation does not require an initial investment and can be initiated at any time. The key for the success of this alternative is the development of interpersonal relationships between the operators and/or other personnel who will be involved in the partnership.

**SECTION FIVE****5.1.3 Contractual Assistance****5.1.3.1 Contract with Private Third Parties**

Contractual assistance may include contracting with a private company to operate a single or multiple systems. In this case, each entity still has to follow their respective Proposition 218 requirements. In most cases, each individual entity would develop a contract with the private operating contractor. In this case, the water purveyor and private contractor could, at any time, enter into a contract for services. There will be some legal service costs associated with drafting and executing the contract.

In some situations, a group of local water systems may choose to jointly enter into a contract with the private entity to get a reduced rate from the private contractor. In this case, each entity would still be independent and follow their individual Proposition 218 requirements. However, the contract would be drafted and agreed upon by all systems involved. This would require more time and legal service costs upfront than if each water purveyor entered into a separate contract with the private operator.

**5.1.3.2 Contract with Non-Profit Corporation**

Contractual assistance may, alternatively, include contracting with a non-profit corporation to operate a single or multiple systems. Each entity still has to follow their respective Proposition 218 requirements, and each individual entity would develop a contract with the non-profit corporation for operating or management services. In this case, the water purveyor and non-profit corporation could, at any time, enter into a contract for services. There will be some legal service costs associated with drafting and executing the contract.

**5.1.3.3 Contract to Share Services and/or Staff**

Contracting between water systems may include similar cooperation as the Informal Cooperation section, but on a contractual level. It may also involve contracting for operations and maintenance with shared operators running both (or all) systems. This type of contract could be initiated at any time, but would require an initial investment for legal services to negotiate and prepare the contract.

**5.1.4 Inter-Entity Contracts**

Inter-Entity contracts would likely be in the form of a Joint Powers Agreement for public agencies. However, contracts could be developed among private entities as well. The JPA may conduct full joint operations of the system as one entity, but more likely the JPA would have an agreement to consolidate one duty, perhaps either operations or billings. The other system duties would remain the responsibility of each entity.

The JPA would not necessarily have to create a separate entity; it could just be a joint agreement among member entities. JPAs are generally restricted to public entities, although MWCs are allowed to join JPAs.

**SECTION FIVE****SOLUTIONS PILOT STUDY**

This option allows communities to share operations while retaining separate oversight by each individual community. The JPA would have a Board of Directors, and each member entity would typically appoint a director and an alternate. The JPA would have the same requirements for Brown Act, Public Records Act, conflicts of interest 1090, and political reform act. This creates additional restrictions and costs, but increases transparency.

Typically, JPAs do not impose charges directly to the customers. Instead the arrangement is more often that the member entities charge fees of their respective customers and then pay into the JPA. This means that typically a Proposition 218 process would need to be run by each of the separate entities that are imposing their own fees. If it is the case that the JPA is imposing the fees, it could be one Proposition 218 process for the JPA, if there is one rate policy applied equally across the JPA jurisdiction.

### 5.1.5 Ownership Transfer

This option involves full consolidation of multiple water systems into one existing or newly created entity. The surviving entity may be a City if the smaller communities had consolidated with a City, or it may be a special district, such as a Public Utility District (PUD) or Community Services District (CSD). Alternatively, a special act district could be created, similar to the Kings River Conservation District, as an example. If a special act district is created, it must be done through the State Legislature.

Any type of special district would be subject to the same requirements for the Brown Act, Public Records Act, Conflict of Interest 1090, Political Reform Act, and other general local election and government code requirements. Board members can be elected and removed if constituents are unsatisfied with their performance.

The Proposition 218 process would depend on how the rate structure is set. If there is a different charge for different zones, then separate Proposition 218 processes may be needed for each zone. However, with full consolidation where all customers have the same rate structure, only one Prop 218 process would be required for the whole entity.

Consolidation is consistent with State and Federal goals of creating more economies of scale and greater TMF capacity. This provides the most efficient management structure by spreading costs among more customers.

## 5.2 Public vs. Private Governance Structure

The solutions described will generally apply for public water systems, although private water systems can also participate. Public systems have greater access to state funding; however there are funding opportunities available for private systems, but often only as loans and not grants. It is also possible that private water systems can convert from private to public to allow a merger. Private water systems, such as a Mutual Water Company, have the ability to extend services to public or private water systems, either through a simple provision of service or by purchasing the entire system. In some

circumstances, public funding may be available for such consolidations if the funding is provided directly to the public water system.

### 5.3 Policy Issues

[policy issues and/or policy fit]

### 5.4 Costs by Community Size and Setting

Usually, the group that begins to collaborate together will set up a budget for expenditures that may include costs such as mailings, filing of documents, meeting space, etc. Later the group may also identify the cost of having a consultant complete a Merger Plan if entities are to consolidate. The Merger Plan includes a financial plan for the new entity, rate structure, budget, ordinances, staff, office, administration, operation and maintenance, etc. **A sample Merger Plan from XXX is included in Appendix E.**

## 6 DEMONSTRATION PROJECTS

Several large scale regionalization projects have been completed, including:

- East Bay Municipal Utility District, Oakland, California
- Lower Rio Grande Public Water Works Authority (and other regions), New Mexico (link to Lower Rio Grande Public Water Works Authority documentary video: <http://www.lrgauthority.org/aboutusquienessomos.html> )
- Jackson County and Vinton County, Ohio
- Logan/Todd Regional Water Commission, Kentucky
- Iowa (Rich Haberman's example) also (Karl Longley's example elsewhere)

In many cases, it seems that these regionalization projects have followed severe droughts, groundwater contamination, cost of treatment, or other severe events causing loss of water supply. This was the case for the Logan/Todd Regional Water Commission in Kentucky. According to the EPA webinar, Communicating to Gain and Maintain Buy-in, 2012, following a severe drought in the late 1980's, "county water supply planning" was mandated by the state of Kentucky. The result of the county water supply planning was significant. In 1999 Kentucky's 120 counties had 479 public, community water providers, including systems that produced and distributed water, those that were distributors only, and 1 regional water commission. These systems provided access to drinking water for approximately 85% of the population in Kentucky at that time. By late January 2012, the number of water systems was down to 367 (a 23% reduction in the number of systems), and now includes four regional commissions, including Beech Fork, Logan-Todd, Greater Fleming, and Cave Run. Collectively, all systems provide access to drinking water to approximately 95% of the population in Kentucky.

The status of the wastewater side is much different. In 1999 Kentucky had 265 public community wastewater providers, including both systems that collected and treated as well as those that collected only and delivered to a neighboring system for treatment. These services provided access to public system wastewater services to approximately 55% of Kentucky residents at the time. By the end of January 2012, Kentucky had 259 public community wastewater providers. These systems provide access to public wastewater services to approximately 70% of Kentucky residents. They had found that 'big pipe' solutions would not solve Kentucky's wastewater problems, and should only be considered one of an array of possible solutions. Kentucky's public wastewater systems are now beginning to take on a role of the 'responsible management entity' for environmentally sound onsite-wastewater programs.

There are also various examples within the Tulare Lake Basin region for projects on a smaller scale. The demonstration projects within the study area are summarized in **Table 6-1**. Detailed descriptions of these demonstration projects are presented in **Appendix F**.

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Table 6-1. Summary of Demonstration Projects

Name of Community	County	Type of Organization	Water or Sewer Solution	Population	Number of Connections	Source Water Issue <sup>1</sup>	Implemented Solution	Status of Implementation	Funding Source	Project Cost
<b>Contractual Assistance</b>										
<b>Inter-Agency Contracts</b>										
Cutler-Orosi JPWA	Tulare	JPA	Sewer	13,190		N/A	Inter-Agency Contract	JPWA formed in 1983		
Alpaugh JPA	Tulare	JPA	Water							
<b>Ownership Transfer – No Physical Connection</b>										
Alpaugh CSD (?)										
<b>Ownership Transfer – Physical Interconnection</b>										
Four Seasons MHP	Kings	Private	Water		86	A	Annex to the City of Hanford	Design Complete, Construction Funding pending	Prop 84	
Lacey Courts MHP	Kings	Private	Water		20	A	Annex to the City of Hanford	Design Complete, Construction Funding pending	Prop 84	
Hamblin Mutual Water Company	Kings	MWC	Water		40	A	Annex to the City of Hanford	Design Complete, Construction Funding pending	Prop 84	
El Rancho Subdivision	Kings	Private	Water		142	A	Annex to the City of Hanford	Complete	Drinking Water SRF	\$1.0 million
Loan Oak Subdivision	Tulare	MWC	Water		42	N	Annex to the City of Tulare	Complete	CDBG	
Rodriguez Labor	Tulare	Private	Water				Consolidate with	Design Complete,	Prop 84, CDBG	

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Name of Community	County	Type of Organization	Water or Sewer Solution	Population	Number of Connections	Source Water Issue <sup>1</sup>	Implemented Solution	Status of Implementation	Funding Source	Project Cost
Camp							Richgrove CSD	Construction Funding pending		
Matheny Tract	Tulare	Private	Water			A, N	Consolidate with City of Tulare	Design Complete, Construction Funding pending	Prop 84, SRF	\$5.0 million
<b>County Operation of Multiple Zones of Benefit or County Service Areas</b>										
Fresno County CSAs	Fresno	Public	Water/Sewer	Various	Various	Various	Multiple existing County Service Areas			
Tulare County CSAs	Tulare	Public	Water/Sewer	Various	Various	Various	Multiple existing County Service Areas			

1. Source water issues are defined as the following:

- a. **S** = Single Source of Supply
- b. **A** = Arsenic MCL exceedance
- c. **N** = Nitrate MCL exceedance
- d. **U** = Uranium MCL exceedance
- e. **O** = Other MCL exceedance

## 7 POTENTIAL PROJECTS / REGIONS

This section presents representative communities in the Tulare Lake Basin Region for which a management or non-infrastructure solution may be viable. This is solely based on system size and proximity. It is understood that the communities may collaborate based on identifying common needs and common solutions. These potential community pairings are presented as an illustration for the reader to better understand the solutions described. These potential projects may or may not be viable in reality, and the communities themselves must initiate the process and be ready to move forward with a partnership approach. By presenting these potential projects, we are not necessarily recommending that they be implemented. Further evaluation and community outreach will be required.

The goal is to further evaluate and perform a pilot study of two (2) of these potential projects, based on input from the review groups. The level of partnership will not be dictated at the onset of these pilot studies, but rather will be established by the communities involved through community surveys, meetings, and other human interactions to determine the level of readiness.

Some of the potential pilot projects that may be evaluated include:

Seville, Yetttem, Cutler, Orosi, East Orosi, Sultana, and Monson – A Shared Services Study for these communities is currently underway as a pilot project for the Upper Kings IRWMA DAC Study. The Upper Kings IRWMA pilot project for this Northern Tulare County subregion will evaluate the impacts of combining services for all or portions of the various districts' operations.

Lanare- Riverdale (consolidation of water treatment and supply)

Communities in West Fresno County along the California Aqueduct. (Coordination of water treatment operations, billing and other ongoing services.)

Communities surrounding the City of Porterville including East Porterville to the east, and Poplar, Cotton Center to the west, can develop a combined management structure, consolidate with the City of Porterville, or contract with a private water company familiar with dealing with public water systems.

Firebaugh- Las Deltas

Matheny Tract – Tulare (project in progress?)

Arvin – Edmonson Acres (completed)

Raisin City – Perry Colony

West Goshen with Goshen-Calwater (underway through emergency funding) – example of how an emergency situation can spur consolidation

Plainview – Central

**SECTION SEVEN**

Consolidation of joint power authority of separate districts into one district

Alpaugh/Angiola/Allensworth (already in progress)

Cutler-Orosi Wastewater

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## 8 FUNDING OPPORTUNITIES AND REVENUE SOURCES

State regulators and funders can begin encouraging these partnerships by providing educational material as well as funding opportunities. Some existing funding opportunities and proposed drinking water legislation are included in this section.

### 8.1 Traditional CDPH Drinking Water Funding Programs

CDPH currently administers and oversees several sources of funds to address drinking water quality issues. The sources of these funds are summarized below.

#### 8.1.1 Safe Drinking Water State Revolving Fund (SRF)

CDPH uses the resource of the SRF for low interest loans or grants to enable water systems to fund necessary infrastructure improvements. CDPH manages SRF resources to fund projects to ensure that public water systems are able to provide an adequate, reliable supply of safe drinking water that conforms with federal and state drinking water standards. The funds are provided from the federal government, with 20 percent state matching. Interest and loan repayments are re-incorporated into the fund. The SRF currently provides ongoing allocations of approximately 100 to 150 million dollars per year.

#### 8.1.2 Proposition 50 Funding

California voters passed Proposition 50 – Water Security, Clean Drinking Water, Coastal and Beach Protection Act, in 2002. CDPH is responsible for portions of this act that deal with water security, safe drinking water, and treatment technology. Proposition 50 allocated approximately 500 million dollars to CDPH for use as direct grants and loans to community water systems for infrastructure development, construction, and maintenance. Proposition 50 also allocated funds to the State Water Resources Control Board (SWRCB) and to the Department of Water Resources (DWR). CDPH's portion of the Proposition 50 funds has been fully allocated, and CDPH is no longer accepting applications for this funding source.

#### 8.1.3 Proposition 84 Funding

California voters passed Proposition 84 – Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Act, in 2006. Proposition 84 allocated approximately 250 million dollars to CDPH for grants and loans to communities for drinking water planning and infrastructure. This 250 million dollar allotment included 60 million dollars specifically earmarked for use as grants to reduce or prevent contamination of groundwater that serves as a source of drinking water. Proposition 84 also allocated funds to DWR for use in Integrated Regional Watershed Management planning and development. The CDPH component of Proposition 84 is fully allocated and CDPH is no longer accepting applications for this funding source.

**SECTION EIGHT****8.1.4 DWR IRWM Program**

In 2002, Senate Bill 1672 created the Integrated Regional Water Management Act to encourage local agencies to work cooperatively to manage local and imported water supplied to improve the quality, quantity, and reliability.

DWR has a number of IRWM grant program funding opportunities. Current IRWM grant programs include: planning, implementation, and stormwater flood management. DWR's IRWM Grant Programs are managed within DWR's Division of IRWM by the Financial Assistance Branch with assistance from the Regional Planning Branch and regional offices.

**8.1.5 Community Development Block Grant Program**

The Community Development Block Grant (CDBG) program is a flexible program that provides communities with resources to address a wide range of unique community development needs. The CDBG program was initiated in 1974 and continues to provide funding.

**8.1.6 USDA Rural Development**

United States Department of Agriculture (USDA) Rural Development provides program assistance funding through direct loans, guaranteed loans, and grants. USDA Rural Development provides direct loans and grants to develop water and waste disposal systems in rural areas and towns with a population not in excess of 10,000. These funds are available to public bodies, non-profit corporations, and Indian tribes. Additionally, USDA Rural Development provides loan guarantees for the construction or improvement of water and waste disposal projects serving the financially needy communities in rural areas. The water and waste disposal guarantee loans are to serve a population not in excess of 10,000 in rural areas.

**8.2 Newer and Emerging CDPH Funding Programs****8.2.1 Emergency Funding for Interim Water Solutions**

Funding is available for small public water systems (PWSs)<sup>1</sup> to implement interim drinking water solutions in severely disadvantaged communities (SDACs). Communities with unsafe drinking water are eligible to apply for up to \$50,000 in grant funding from CDPH if that community has at least a pending pre-application or application that is rated A through G on the priority pollutants list. Eligible interim solutions include distribution of bottled water, installation of water filtration systems (either as point of use devices or as water vending machines), repairs to existing water systems, connecting adjacent water systems, drilling replacement wells and other

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<sup>1</sup> Public water systems with fewer than 1,000 service connections and population served less than 3,300. Must Violate one or more health-based drinking water standards (primary MCL)

**SECTION EIGHT****SOLUTIONS PILOT STUDY**

projects to provide safe water. Costs for planning and preparing project application are also fundable.

Program Eligibility and Application Information:

CDPH has determined SDACs with unsafe drinking water constitute a “public health emergency”, making them eligible for emergency funding. A total of \$4 million dollars is immediately available for this emergency funding program. In order to qualify, communities must be severely disadvantaged, with a median household income of 60 % or less of the statewide median household income and be served by a PWS with unsafe drinking water. Communities that meet this definition should apply directly to their respective CDPH District office.

8.2.2 Funding for Pre-Planning and Forming Public Water Systems

CDPH has proposed a new program to assist communities of private well owners to consolidate with state small water systems (state smalls) and other existing PWSs. This program would also fund efforts to consolidate multiple existing state smalls or PWSs, into a new water system or where an otherwise eligible entity is not yet formed.

Program Eligibility and Application Information:

Currently, communities of private well owners and state smalls<sup>2</sup> (systems between 5-14 connections) do not qualify for funding under the Safe Drinking Water State Revolving Loan Fund (SDWSRF), which grants millions of dollars a year to PWSs for water related projects. Under a new set-aside, communities of private wells or state smalls that want to create a new water system or be consolidated into existing PWSs are eligible to receive SDWSRF funding. Funding is primarily for pre-planning, including formation of new legal entities (i.e. PWSs).

8.2.3 The Small Water Systems Program Plan (SWSP)

In 2012, CDPH announced plans to concentrate funding and other resources on 177 specific small public water systems (PWSs)<sup>1</sup> in need of meeting drinking water standards. Most of the water systems are in disadvantaged communities. This program outlines specific actions that CDPH intends to take that will incrementally reduce the number of small systems not meeting the State’s water quality standards. CDPH staff have set a goal of bringing 63 of the 177 identified small systems into compliance by the end of 2014 and most of the remaining others within three years.

Specific Actions Taken by CDPH Staff:

CDPH and third-party providers will prioritize these small systems over other systems for receiving available technical and financial resources and work with stakeholders to identify opportunities for consolidation.

<sup>2</sup> State small system serves at least five, but not more than 14 service connections and does not regularly serve drinking water to more than an average of 25 individuals daily for more than 60 days out of the year.

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## SOLUTIONS PILOT STUDY

CDPH will track progress towards resolving problems and provide stakeholders an annual report on the status of all water systems still listed.

CDPH staff, working with counties, will prepare a one-page summary for each system on the list that identifies issues and barriers that keep water systems from executing permanent drinking water solutions.

CDPH will create a small system specific webpage, with technical information and updates.

Program Eligibility and Application Information:

Eligible communities are those with small systems with fewer than 1,000 service connections and a population up to 3,300. Communities that meet these criteria and are currently out of compliance, with one or more drinking water quality violations, will be contacted by CDPH with further details on how to participate in this program. CDPH intends to work closely with third party provider to fully implement this program. Communities in the Central Valley, that believe they qualify for this program, but aren't listed as one of the 177 identified communities should contact CDPH Drinking Water Program staff, the Community Water Center, or a respective regional third party provider (Rural Community Assistance Corporation (RCAC), California Rural Water Association (CRWA) and Self Help Enterprises). **San Joaquin Valley Contact List:** CDPH Drinking Water Program (916) 552-9127, Marques.Pitts@cdph.ca.gov; Community Water Center (559) 733-0219 or (916) 706-3346; Self Help Enterprises (559) 651-1000.

### 8.3 Proposed Drinking Water Legislation

#### 8.3.1 Assembly Bill 1 (Alejo): Salinas Valley Clean Water Funding

This bill would authorize the California Legislature to appropriate \$2 million to the State Water Resources Control Board (State Water Board) from fines and penalties generated. These funds would then be appropriated to the Greater Monterey County Regional Water Management (GMCWM) to develop an integrated water quality and wastewater treatment program plan for disadvantaged communities in the Salinas Valley.

#### 8.3.2 Assembly Bill 21 (Alejo): Small Community Safe Drinking Water Grant Fund

This bill would provide funds for disadvantaged communities without safe drinking water by authorizing the assessment of a charge in lieu of interest payments on loans and depositing the monies into a newly created grant fund. The new grant program would allow disadvantaged communities who are unable to repay interest-bearing loans to apply for grants to remedy their unsafe drinking water.

**SECTION EIGHT****8.3.3 Assembly Bill 30 (Perea): Small Community Grant Funds**

The State Water Pollution Control Revolving Fund Small Community Grant Fund (SCG Fund) finances wastewater treatment projects in small disadvantaged communities. The SCG Fund is scheduled to sunset in 2014. This bill would extend the sunset date to 2019.

**8.3.4 Assembly Bill 115 (Perea): Small Community Consolidation**

This bill would clarify applicant eligibility for state drinking water funding and encourage existing PWSs, and private well owners, primarily in disadvantaged communities with unsafe drinking water, to consolidate and form a new or revised PWS.

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## 9 SUSTAINABILITY OF PROGRAM

### 9.1 Sustainability

This section discusses the steps that may be taken to insure the long-term sustainability of the implemented program.

Include leadership development

Discuss importance of community involvement and community buy-in

Develop a table and more clear analysis to show benefits of shared solutions in rates, reliability, safety, taste, etc.

Long term planning is critical to the success and sustainability of a system. Once the system is operated and managed by an entity (newly created or existing), then the decision makers can focus on long term planning and completing different tools for the effective management of the water systems. These may include Asset Management Plans, Water Conservation and Drought Management, Capital Improvement Plans, etc.

### 9.2 Community Involvement

Local decision makers must involve the community in the process, and invite assistance providers if necessary to explain the collaborative effort. Public meetings should be held about the regional entity being proposed. These meetings should be held at different communities within the region, since many will feel more comfortable in their 'home' setting. Rather than holding meetings at a "central" location, holding meetings at the various small communities involved may encourage cooperation and get the communities engaged.

In addition to communicating with board members, decision makers, and council members, it is important to reach out to the community and get them involved. Often the community members (customers) do not care about loss of control. They care about quality of service, including reliable supply and water quality, and reasonable rates. Often, community members are not aware of the water system needs that exist. The community members need to be educated on the deficiencies and needs of their water systems, and understand the water quality issues. By showing community members actual costs to operate and maintain a water system, they may begin to understand and appreciate the cost of the service to deliver water to the customer's tap.

### 9.3 Operations and Maintenance Impacts

[Discuss operations and maintenance impacts]

Long term management of operations

Replacement program including funding

Discussion of rates

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## 10 OBSTACLES AND BARRIERS

### 10.1 Potential Obstacles and Barriers

Communities have identified and worked through obstacles to implementing a partnership solution. Some of the potential obstacles that have been identified and solved include:

- Consolidation may result in a perceived loss of identity for a local community. However, it is recommended that community residents weigh the ability to sustain a clean, reliable, and affordable water supply against what may be only a perceived loss of independence or identity. There are other areas of the communities that have already been consolidated such as schools, senior citizens services, etc.
- Systems that merge or acquire other systems may absorb those acquired systems' debts. However, they have also acquired assets. The systems that have debts generally have newer or up-to-date infrastructure, and so there is a balance between liabilities and assets.
- The initial costs associated with holding meetings and discussing partnership solutions, soliciting community involvement, and other associated tasks may be a barrier. However, seek assistance and the region may receive help to facilitate the process.
- Local political barriers can be significant, but as mentioned above, it should be emphasized that cooperation and sharing of resources may allow the communities involved the ability to sustain a clean, reliable, and affordable water supply.
- Management goals of multiple systems may conflict. This will take additional efforts to coordinate and develop a management structure for the consolidated entity.

#### 10.1.1 Putting Aside Historic Rivalries

Many obstacles and barriers are rooted in historic rivalries or political barriers between partnering communities and these rivalries can completely stop a partnership from getting off the ground. These rivalries can be rooted in school traditions, or other social or political rivalries. The effect of these challenges cannot be minimized or forgotten when approaching a partnership. It is important to communicate and discuss these barriers when they are recognized, and encourage the communities involved to look past those differences for the common good of all involved. The ability to sustain a clean, reliable, and affordable water supply will hopefully outweigh any barriers between the communities. It is the same rationalization for communities who fear the loss of perceived independence or identity. That being said, if a community (or group of communities) is not ready to partner with a neighboring system, it should not be forced upon them. The communities identified as being candidates for a regional solution

**SECTION TEN****SOLUTIONS PILOT STUDY**

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should be educated as to the benefits of a regional approach, but the decision to move forward should still lay with each individual community.

Due to the community identity and rivalry type issues that may be faced, transparency is key. The partnership development process should be documented and available to the public.

#### 10.1.2 Learning About Each Other – The “Dating” Stage

The facilitator(s) of any partnership should be sensitive to the fact that each entity involved is bringing different assets and different challenges to the table. Due to these differences, one community or system may feel like a neighboring community benefits more, which can lead to the feeling that partnership is somehow unfair or skewed. This sense of unfairness can create a barrier to forming partnerships. However, respect and caring for each other’s issues invites cooperation.

It is important to help people understand that it is impossible for everyone to be equal. Not everyone will benefit exactly the same way or in the exact same amount from a merger or consolidation project. However, it should be emphasized that each entity will benefit well enough to justify their participation. However, it may be that there is a larger community involved that may be included to provide a solution for the other communities, and may not be in need of the partnership itself. However, the deal must be beneficial in some way to that community. Perhaps, in exchange for annexing one or more small, neighboring systems into their system, they may receive funding for a new well or improvements to their water or wastewater treatment facility.

#### 10.1.3 Building Trust and Commitment – The “Getting Engaged” Stage

Another concern or barrier that these communities may feel is loss of control if their system is being merged into another entity. This is a real concern, but it could be that, although they may be losing control on some level with one part of their system, they may have the ability to stay informed and involved in their system. Developing this comfort level is a large reason why it can be beneficial to start small, with informal agreements. Then as trust is gained, the communities can (but do not have to) progress toward contractual agreements and potentially full consolidation. There are situations when full consolidation is the first and only way to a solution, but some communities may prefer to hold out until they develop a certain level of comfort with the other community.

#### 10.1.4 Visionary Leaders and Communities

The broader community should be invited to engage in decisions about a partnership. When an entity becomes part of a regional system, there is a possibility that the entity can actually gain control over larger or critical issues that have been put off within its own system. If an entity, for example, decides to contract operator services, it can free them up to really manage the system (not just operate the plant) and focus on issues that would not only benefit the community now but will benefit future generations.

**SECTION TEN****SOLUTIONS PILOT STUDY**

One thing to note is that a system's customers, the people who are drinking the water, generally do not have as much concern about loss of control as long as there is quality of service and reasonable rates. It is the system managers, decision makers, and elected officials that are most concerned about the loss of control. It is usually a "me" issue rather than a community benefit issue that the leadership works through once they understand the greater benefits and feel trust and confidence in the process.

If the decision about a partnership is brought to the broad community, they may understand the benefits with less concern regarding the obstacles discussed herein. For that reason, it may be beneficial for the facilitator of a partnership to reach out and get closer to the community by holding meetings at churches, schools, or the local volunteer fire department.

## **10.2 Overcoming Obstacles and Barriers – Facilitating the Process**

### **10.2.1 Focus on Common Needs versus Common Goals**

In order to get past some of the obstacles and barriers that may be preventing communities from working together to find a common solution, it is important that there is a facilitator to assist in the process, and that the facilitator of the partnership focus on the common need that they are trying to resolve. The goal is to find a way to work together to meet the common needs of the region. It should be emphasized that the long term health and wellbeing of the residents within the region should be the primary goal, and should outweigh the other obstacles and barriers that may be inhibiting the communities from working together.

The facilitator must encourage communities to focus on the future. A regional partnership may be the solution needed to supply sufficient potable water to the communities involved, without interruption, for years to come. Focusing on the future and the health of the local residents and the property value may encourage communities to begin to look beyond the history discussed above and think about 10 years from now, and think about the benefit they can provide for their children and grandchildren. A property without water has no value for future generations. The focus should be centered around the long term goal of providing a safe, healthful, and sufficient water supply, not the politics or rivalries that may exist.

### **10.2.2 The Economies of Scale: Dividing the Cost by Many Helps Everyone**

Another solution to overcoming some of the obstacles mentioned is to make the project about the numbers as much as possible. Presenting the numbers can help to deal with things more concretely. For a specific region or group of communities proposed, the adjustments in rates and revenues can be presented based on actual demonstrable cost. In most cases, it is anticipated that the regional or consolidated rate will be less than if each party tried to resolve their individual issue on their own through treatment or drilling new wells. It should be noted that this will not likely mean rates will be reduced,

**SECTION TEN****SOLUTIONS PILOT STUDY**

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but that rates will not require as much of an increase as would be required to bring each individual system into compliance. Focusing on the numbers helps to take the distrust out of the equation.

**10.2.2.1 Infrastructure Solutions**

The intent of a regional solution is to provide a win for all parties involved. If the solution is not projected to be beneficial, it will not be recommended as a solution. In regionalizing and working together, whether it includes informal cooperation with a neighboring system to full consolidation, communities are able to provide additional redundancy and resilience, and also provide economies of scale, which in most cases will bring individual costs down. An idea that tends to hit home with people is the idea of resiliency through redundancy. A regional water system can build redundancy into the system, making the system resilient to failures within the system. Additionally, if a member no longer has to treat their water, or there is a regional treatment facility, that enables them to concentrate on the distribution system and make that more efficient.

**10.2.2.2 Funding is a Big Benefit**

A regional project may also have more immediate political benefits, in that funding agencies and state legislatures may applaud the move towards regionalization. A regional approach may give the project an advantage in finding funding because the funding agencies will recognize and appreciate partnerships. A regional project will provide a unified voice for funding that each individual entity probably does not currently enjoy on its own.

**10.2.2.3 Technical Assistance**

Regulatory agencies can also be partners in the process to help with messaging and providing technical information to the communities. As technical experts, CDPH could help educate the community about the state of the water system and the implications related to public health. CDPH could participate in public meeting, explaining what the regulations are, and explaining what non-compliance means for the system. CDPH can explain the effect of poor water quality on public health. It may be beneficial for both sides to have CDPH available to educate and help promote a water system partnership effort, rather than interacting with the system in an enforcement action. In communicating in this manner, it may help develop more of a relationship between the water systems and CDPH and make coordination and cooperation better in an ongoing basis.

## 11 THE IMPLEMENTATION PHASE

The solutions presented in this report are expected to be viable options for communities that choose to move forward with a partnership approach. There are implementation steps that need to be done by any specific group of communities that may choose to regionalize. Complimentary to the solutions presented in this report, there needs to be an education campaign throughout the Tulare Lake Basin region to educate residents on the water issues that are faced by communities in the area, and begin to plant the seed regarding potential solutions.

In the Implementation Phase, the communities get to work on the following:

- Assess or review existing reports that assess the regional administrative and managerial structures available/viable for designated regions and decide what applies to the region that is doing the partnership.
  - Organizational status and structure
  - Regulatory compliance
  - Governance structure
  - Assets and Liabilities
- Facilitate public outreach and document the process.
  - Public education is critical, particularly for the local government officials who are involved in key decisions in relation to the restructuring of existing water systems. Public outreach is also critical to the general public. The general public needs to acquire full understanding of the steps, potential associated costs, impacts and benefits. Open discussions on issues that will impact and change the lifestyle of community residents is a key element in the successful completion of a regional project.
- Perform financial analysis/ shared services studies
- Complete an Asset Management Plan

## 12 CONSIDERED PERSPECTIVES

Discussion items and recommendations should be considered from the perspective of the customer, the perspective of the water or wastewater service provider, the perspective of various agencies, as well as the legislature perspective. This section discusses each of the considered perspectives.

### 12.1 Customer Perspective

Regionalization requires an individual perspective. Each participating leader or community member needs to consider various questions regarding regionalization.

- Can consolidation proceed while allowing each entity involved to maintain a level of quality that is acceptable to the customers?
- Will all entities involved have the same rate structure, or will it differ by community?
- Will there be more staff needs or less staff needs?
- In what shape are the finances of the new partners?
- What about uncollected accounts and difficult customers?
- Level of funding/affordability/willingness to pay
- DAC (household income levels versus water service costs)

### 12.2 Provider Perspective

- Provider Perspective – annual revenue versus expenses
- Leadership issues
- Decision makers

### 12.3 Agency Perspective

- Agency Perspective – does the solution meet water quality/demand objectives

#### 12.3.1 County Level

- Facilitate aide arrangements/ agreements
- Land use control/zoning/building permit (new development to pay own way – water/sewer infrastructure)

#### 12.3.2 State Health/DWR/Regional Board

**SECTION TWELVE****SOLUTIONS PILOT STUDY**

- Help with funding
- Sharing knowledge
- Guidelines/directives to fix violations
- Sustainability – require a legacy plan (successor plan) when new systems are established

**12.3.3 Federal EPA/Funding Agencies/CDBG**

- Help with funding
- Sharing knowledge
- Guidelines/directives to fix violations

**12.4 Legislative Perspective**

- Legislative Perspective – What/where are new policies needed to allow for funding opportunities

Provide new legislation and funding opportunities to encourage and promote the development and use of regional cooperation and consolidation of services. This may begin with regulation of any new system within a municipality or within  $\frac{1}{2}$  mile radius of an existing entity providing water or sewer service to attempt to obtain service from that provider. For existing public water systems that are struggling to meet compliance or have a history of non-compliance, promote or enforce action towards regionalization for any system that violates a final order.

Database development issues

Additional funding issues

Other issues

**12.5 Other Considerations**

- Churches
- Schools
- Non-profits
- For profit companies
- Foundations
- Farm Interests
-

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CDPH resources, database

PolicyLink?

Other studies used?

## **APPENDICES**

**APPENDIX A**  
**DATABASE SUMMARY TABLES**

DRAFT

**Table A-1. Water Quality Exceedances**

	Pollutant Combinations								
	Coliform Only	Arsenic Only	Nitrate Only	THM (SW) Only	Uranium Only	Fluoride Only	DBCP Only	Perchlorate Only	PCB Only
<b>Fresno County</b>	<b>5</b>	<b>3</b>	<b>1</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Zero connections									
Less than 15 connections			1	4					
15 to 50 connections	3			6					
51 to 200 connections	1	1		3					
201 to 500 connections	1								
501 to 2000 connections		1							
More than 2000 connections		1							
<b>Kern County</b>	<b>6</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>
Zero connections									
Less than 15 connections			1						
15 to 50 connections	4	1		1					
51 to 200 connections	1								
201 to 500 connections	1								
501 to 2000 connections		1							
More than 2000 connections		1					1		
<b>Kings County</b>	<b>1</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Zero connections									
Less than 15 connections									
15 to 50 connections		1							
51 to 200 connections	1								
201 to 500 connections		3							
501 to 2000 connections		1							
More than 2000 connections									
<b>Tulare County</b>	<b>21</b>	<b>2</b>	<b>7</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>
Zero connections									
Less than 15 connections			2						
15 to 50 connections	10		1					2	
51 to 200 connections	8		2						
201 to 500 connections	1	1		1	1				
501 to 2000 connections	2	1	2						
More than 2000 connections									
<b>Total</b>	<b>33</b>	<b>13</b>	<b>9</b>	<b>15</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>0</b>

**Pollutant Combinations**

	<b>Coliform and Arsenic</b>	<b>Coliform and Nitrate</b>	<b>Arsenic and Uranium</b>	<b>Coliform and Uranium</b>	<b>Nitrate and Perchlorate</b>	<b>Nitrate and Uranium</b>	<b>Coliform and THM</b>	<b>Arsenic and Nitrate</b>	<b>Nitrate and DBCP</b>	<b>Coliform and PCB</b>
<b>Fresno County</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
Zero connections										
Less than 15 connections										
15 to 50 connections	1			1						1
51 to 200 connections										
201 to 500 connections										
501 to 2000 connections	1									
More than 2000 connections										
<b>Kern County</b>	<b>2</b>	<b>1</b>	<b>9</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>
Zero connections										
Less than 15 connections										
15 to 50 connections		1	2	1						
51 to 200 connections			2			1			1	
201 to 500 connections	1		1							
501 to 2000 connections			3							
More than 2000 connections	1		1							
<b>Kings County</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>
Zero connections										
Less than 15 connections										
15 to 50 connections										
51 to 200 connections										
201 to 500 connections										
501 to 2000 connections							1			
More than 2000 connections										
<b>Tulare County</b>	<b>1</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>
Zero connections										
Less than 15 connections		1								
15 to 50 connections		3								
51 to 200 connections		5								
201 to 500 connections										1
501 to 2000 connections	1								1	
More than 2000 connections										
<b>Total</b>	<b>5</b>	<b>10</b>	<b>9</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>2</b>





Table A-2. Recently Funded Projects

	Quantity 1	Quality 1	Quality 2	Other	# Connections	Approximate Population	Project	Funding Source	Approximate Cost	Approximate Capitol Cost (Total Project)
Four Seasons Mobile Home Park	Single Well	Arsenic exceeds Federal Limit	None	None	86	129	Consolidation with City of Hanford (City of Hanford Regional Consolidation Project)	Prop 84	\$ 252,000	\$ 4,852,000
Lacey Courts Mobile Home Park	Single Well	Arsenic exceeds Federal Limit	None	None	21	50		Prop 84	\$ 59,000	
Hamblin Mutual Water Company	Single Well	Arsenic exceeds Federal Limit	None	None	40	240		Prop 84	\$ 357,000	
Lone Oak Subdivision	Single Well	Nitrate exceeds Federal Limit	Uranium exceeds Federal Limit	Unmetered	42	70	Consolidation with City of Tulare	CDBG	\$ 65,051	
El Rancho Subdivision	2 Inadequate Wells	Arsenic	Uranium	None	142	568	Consolidation with City of Hanford	DW SRF	\$ 1,050,000	
Matheny Tract (Pratt Mutual Water Co)	None	Nitrate	Arsenic	None	323	1200	Consolidation with City of Tulare	Prop 84, SRF	\$ 5,485,528	
Kit Carson School (w City of Hanford)	None	Arsenic	None	Deep Water Levels	1	429	Consolidation with City of Hanford	Prop 84	\$ 3,101,818	
Pioneer School	400gpm	Arsenic exceeds Federal Limit	None	None	1	1577		Prop 84	\$ 1,600,000	
Caruthers Community Services District	None	Arsenic	None	None	674	2103	New well and arsenic treatment project	Prop 84	\$ 5,097,850	
Armona CSD	None	Arsenic	None	None	1255	3239	New well and arsenic treatment project	Prop 84	\$ 6,000,000	
Riverdale PUD	None	Arsenic	Color		950	2900	New well and arsenic treatment project	Prop 84	\$ 7,000,000	
Richgrove CSD	None	Nitrate			520	2882	New well, storage tank, and pipeline	Prop 84	\$ 4,524,103	
Hardwick	Single Well	Uranium		20 connections?	39	138			\$ 1,491,827	
Pixley Public Utility District	Insufficient for peak d	Arsenic	None	None	?	3310	New wells project	Prop 84	\$ 5,000,000	
Tranquillity ID	None	Arsenic exceeds Federal Limit	None	None	341	1064	New well project	Prop 84	\$ 5,005,100	
Zonneveld Dairy Housing	None	Nitrate exceeds Federal Limit	Arsenic exceeds Federal Limit	None	34	141		Prop 84	\$ 40,800	
Tract 92	None	Coliform	None	Chlorination Failing	93	261		Prop 84	\$ 3,941,000	
CSA 49	None	None	None	SWTF doesn't meet reg	43	333			\$ 2,564,431	
Rodriguez Labor Camp w Richgrove CSD	Single Well	Nitrate	None	None	35	140	Consolidation w Richgrove CSD	Prop 84, CDBG	\$ 4,150,974	
Fairways Tract WC	Single Well	Nitrate			63	275	Consolidation w City of Porterville	Prop 84	\$ 916,105	
Edmundson Acres MWC	?	?			76	550	Consolidation w Arvin CSD	Prop 84		
Arvin CSD	None	Nitrate	Arsenic		3536	14713	New wells and arsenic treatment proje	Prop 84	\$ 4,084,484	
Tooleville MWC	None	Nitrate			77	350	Consolidation w City of Exeter	Prop 84	\$ 3,021,535	
Cutler PUD	None	Nitrate			1197	6300	New well and blending project	Prop 84		
Hungry Gulch Water System	?	?			20	30	Consolidation w Boulder Canyon	Prop 84	\$ 925,000	
Akin Water Company	None	Nitrate			22	50	Consolidation w City of Porterville	Prop 84	\$ 315,500	
Son Shine Water System	None	Nitrate	Arsenic		106	250	Consolidation w Arvin CSD	Prop 84		
Beverly Grand MWC	Single Well	Nitrate			28	108	Consolidation w City of Porterville	Prop 84	\$ 801,000	

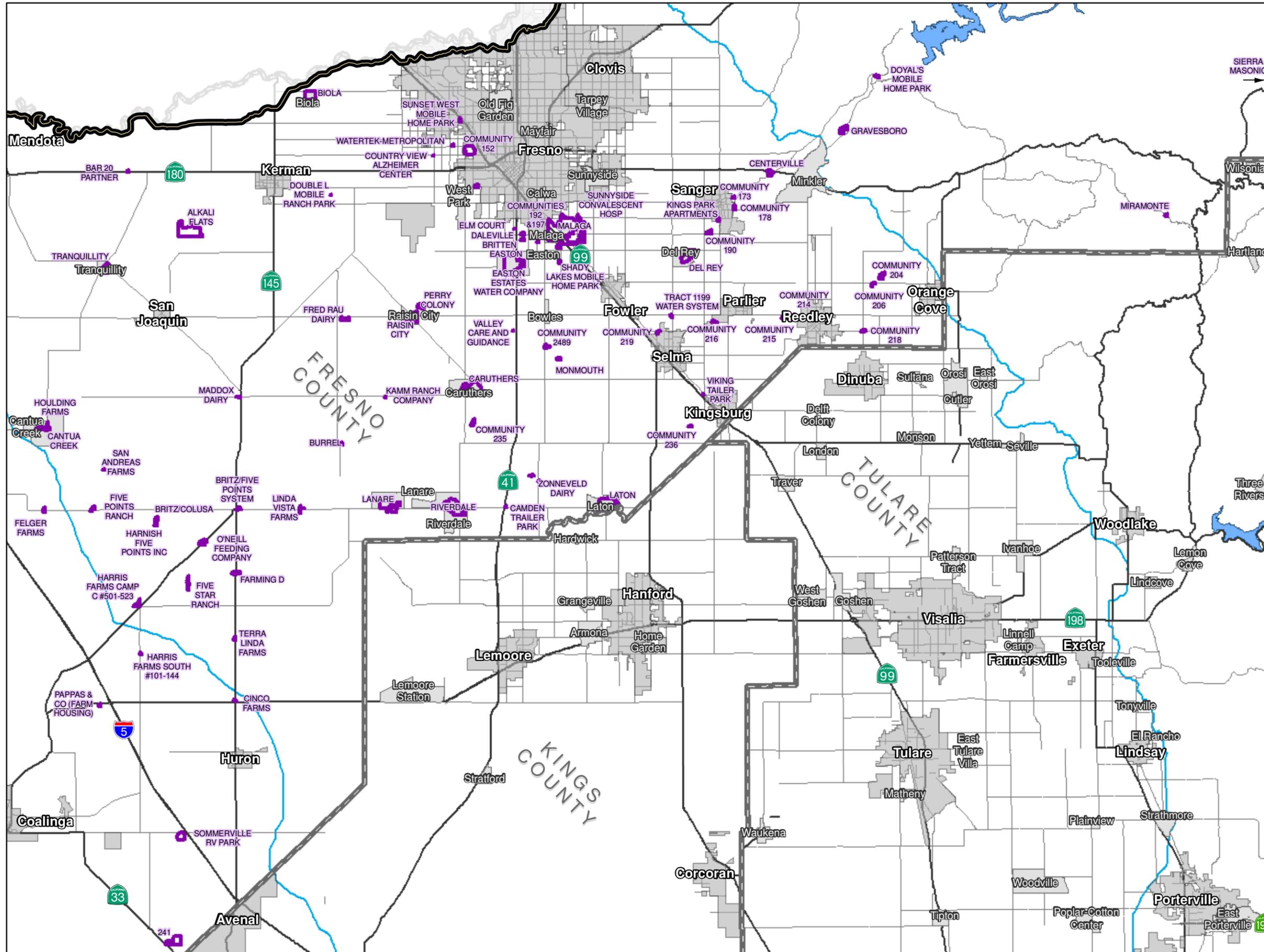
**APPENDIX B**  
**COMMUNITY MAPS**

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**Tulare Lake Basin  
Disadvantaged Community  
Water Study**

FRESNO COUNTY  
Communities

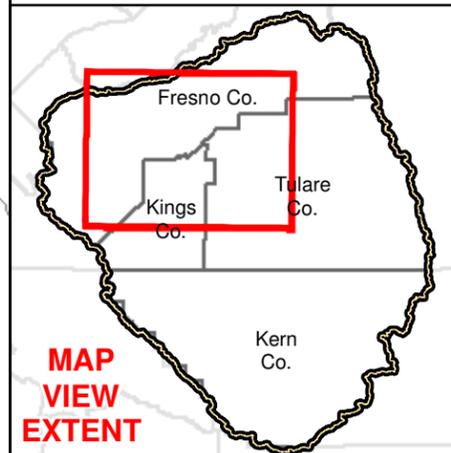
DAC and SDAC Communities



**Legend**

- Tulare Lake Basin
- County
- DAC or SDAC Community
- City
- Community (Non-Incorporated)
- Major Road
- Highway / Interstate
- Major Canal

**DRAFT**

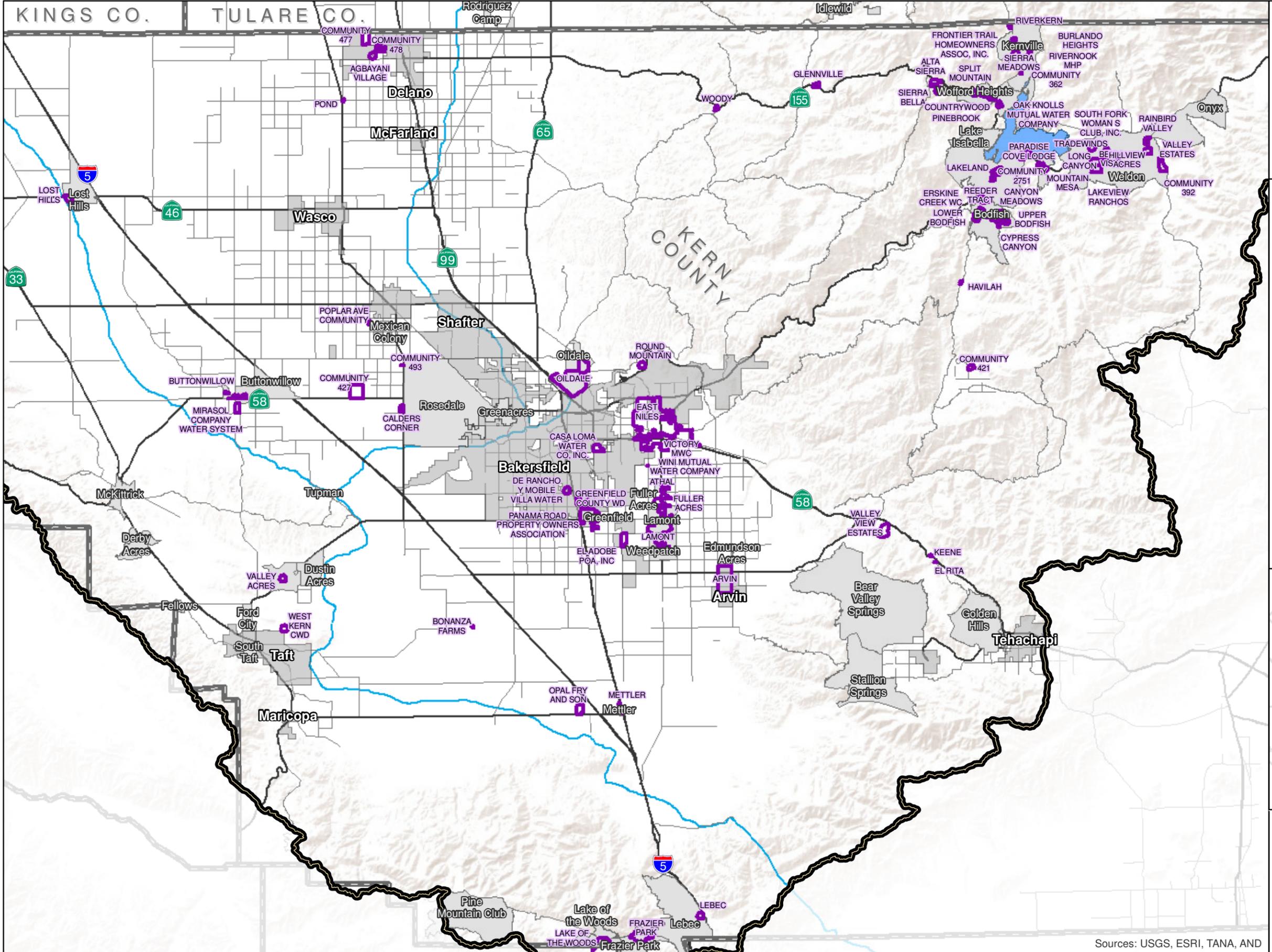


**MAP  
VIEW  
EXTENT**



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**Tulare Lake Basin  
Disadvantaged Community  
Water Study**

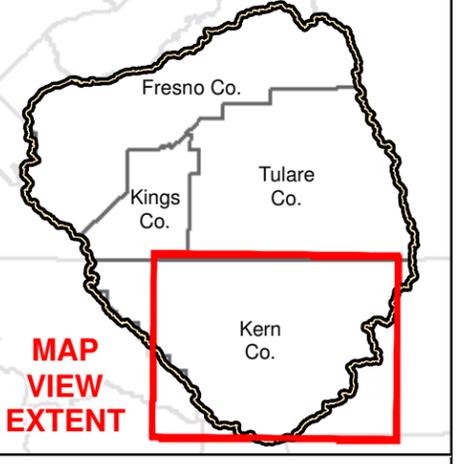
**KERN COUNTY  
Communities**

DAC and SDAC Communities

**Legend**

- Tulare Lake Basin
- County
- DAC or SDAC Community
- City
- Community (Non-Incorporated)
- Major Road
- Highway / Interstate
- Major Canal

**DRAFT**



0 2 4 6 Miles

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Sources: USGS, ESRI, TANA, AND

**Tulare Lake Basin  
Disadvantaged Community  
Water Study**

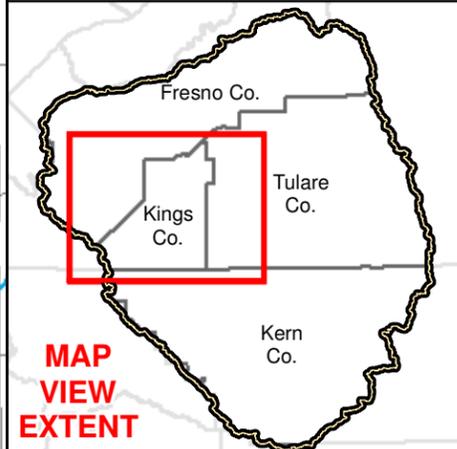
KINGS COUNTY  
Communities

DAC and SDAC Communities

**Legend**

-  Tulare Lake Basin
-  County
-  DAC or SDAC Community
-  City
-  Community (Non-Incorporated)
-  Major Road
-  Highway / Interstate
-  Major Canal

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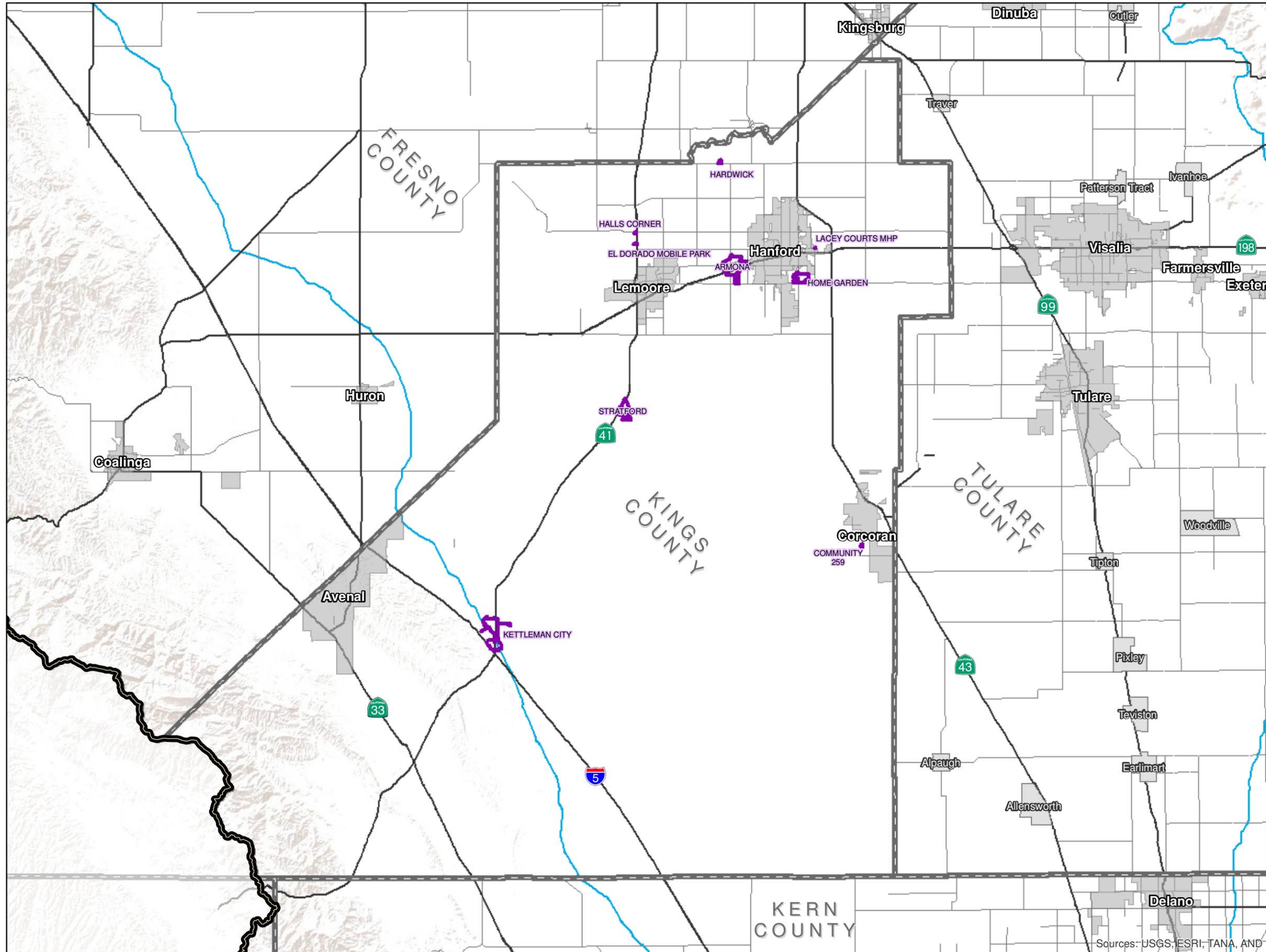


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Sources: USGS, ESRI, TANA, AND

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Disadvantaged Community  
Water Study**

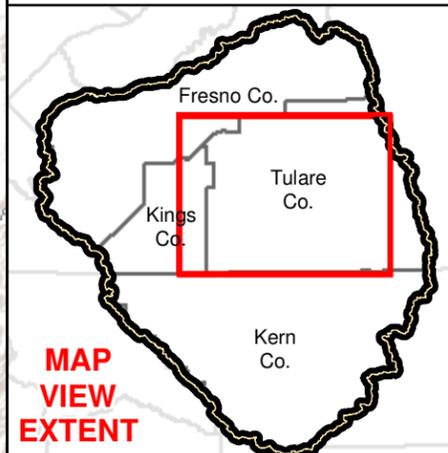
TULARE COUNTY  
Communities

DAC and SDAC Communities

**Legend**

-  Tulare Lake Basin
-  County
-  DAC or SDAC Community
-  City
-  Community (Non-Incorporated)
-  Major Road
-  Highway / Interstate
-  Major Canal

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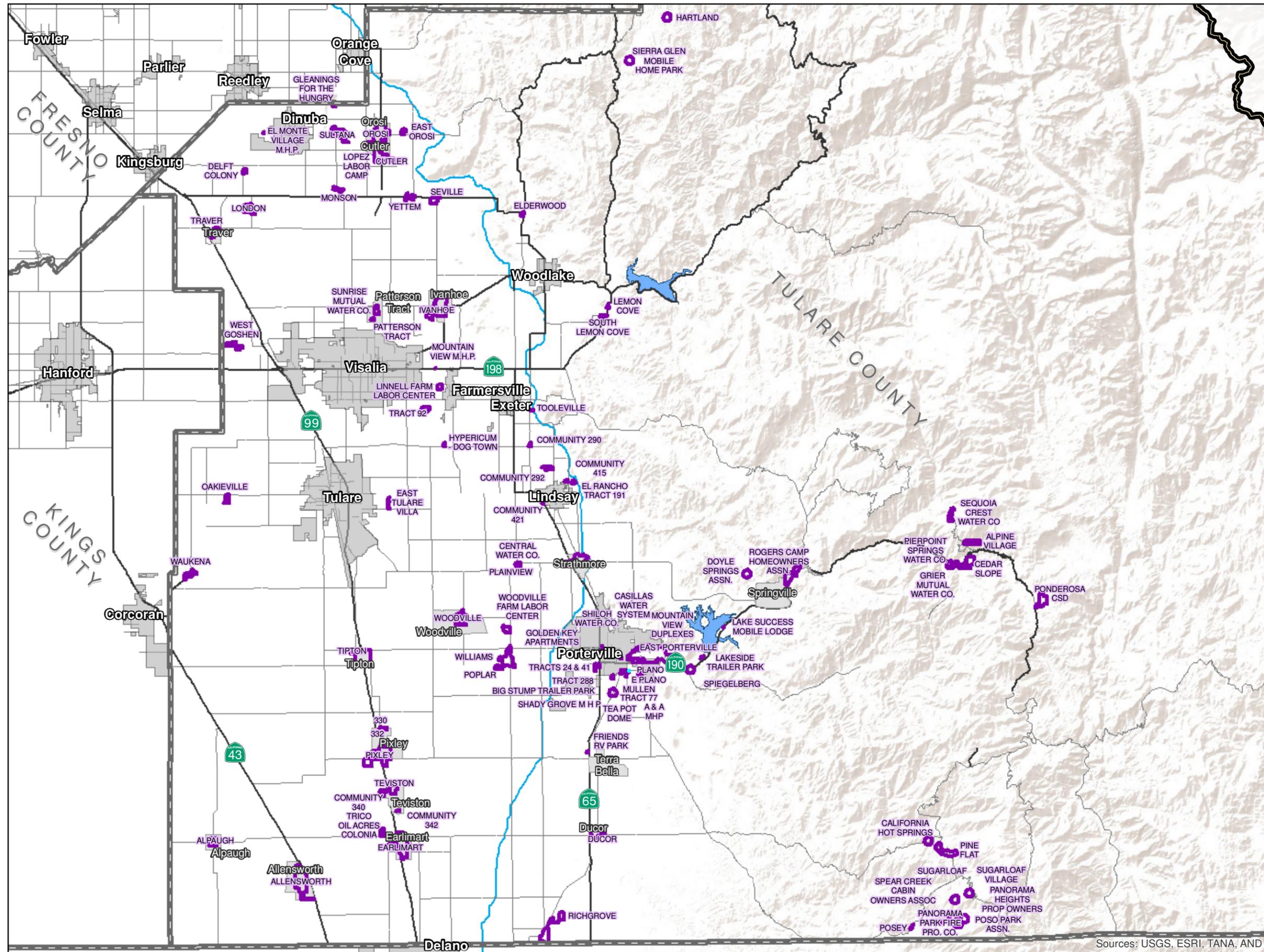


**MAP  
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Sources: USGS, ESRI, TANA, AND

# Tulare Lake Basin Disadvantaged Community Water Study

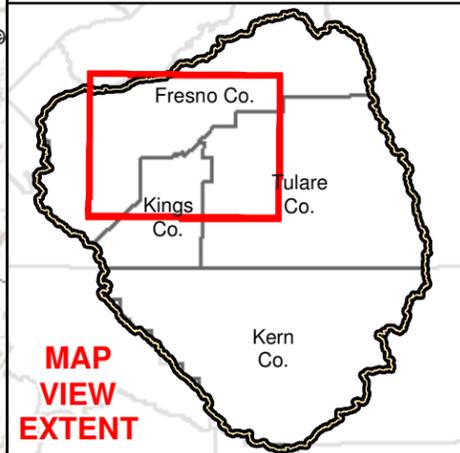
## FRESNO COUNTY Communities

DAC and SDAC Communities  
With A Single Active Water Source  
Or Water Quality Problems

### Legend

-  Tulare Lake Basin
-  County
-  Source Exceeded MCL for either Arsenic, Uranium, Nitrate or Half Nitrate (2008-10)
-  1 Active Water Source Identified
-  City
-  Community (Non-Incorporated)
-  Major Road
-  Highway / Interstate
-  Major Canal

# DRAFT



**MAP  
VIEW  
EXTENT**

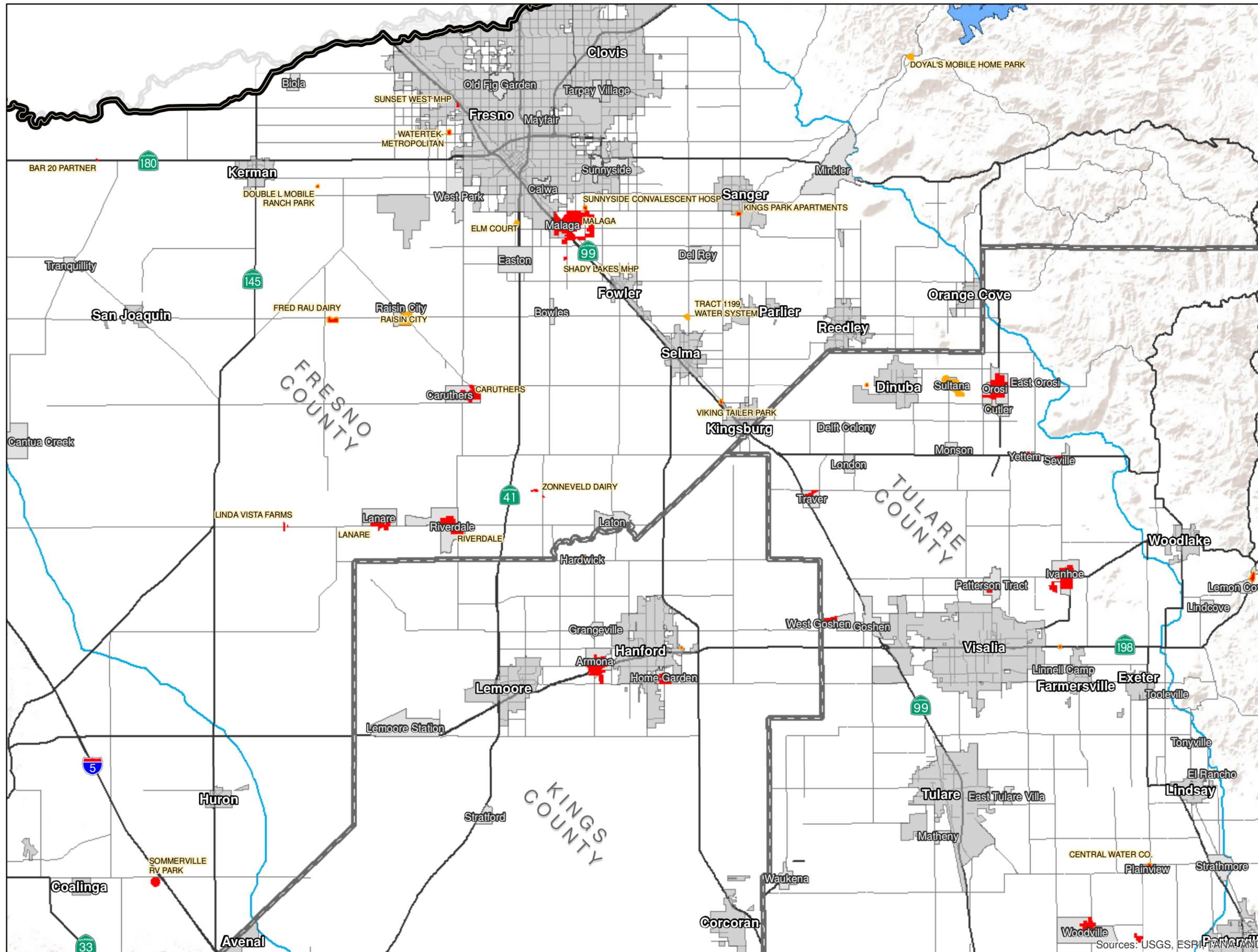
0 2 4 6 Miles

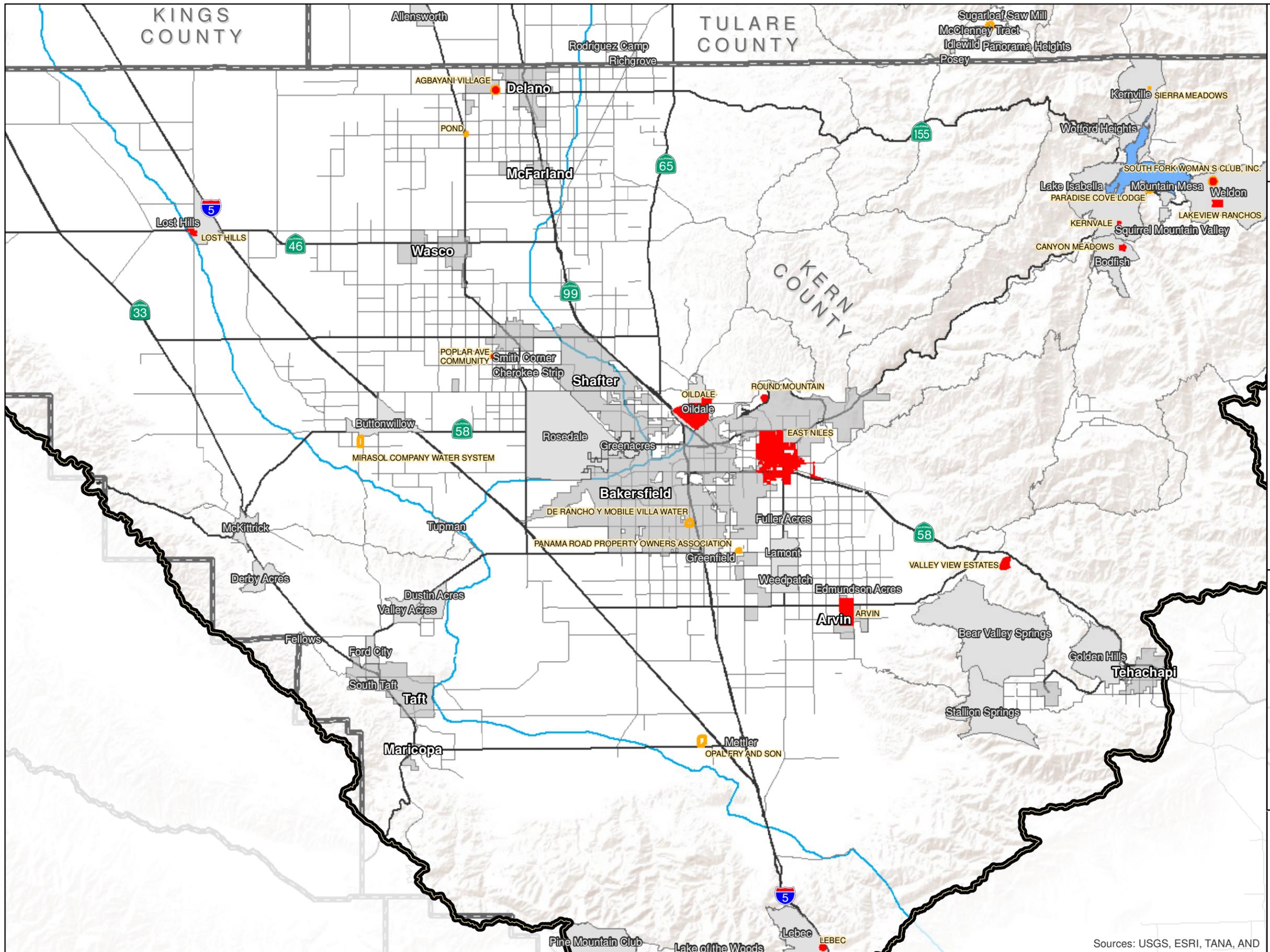


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Sources: USGS, ESRI, PANHANDLE





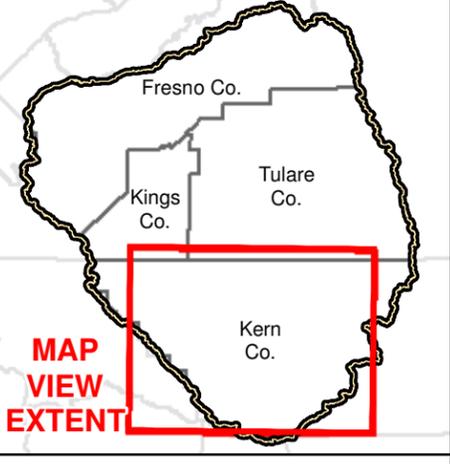
# Tulare Lake Basin Disadvantaged Community Water Study

## KERN COUNTY Communities

DAC and SDAC Communities  
With A Single Active Water Source  
Or Water Quality Problems

- Legend**
- Tulare Lake Basin
  - County
  - Source Exceeded MCL for either Arsenic, Uranium, Nitrate or Half Nitrate (2008-10)
  - 1 Active Water Source Identified
  - City
  - Community (Non-Incorporated)
  - Major Road
  - Highway / Interstate
  - Major Canal

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Sources: USGS, ESRI, TANA, AND

# Tulare Lake Basin Disadvantaged Community Water Study

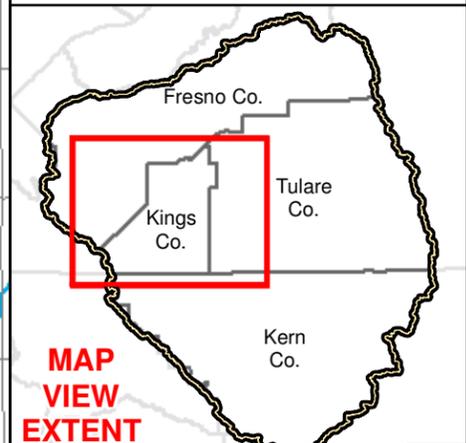
## KINGS COUNTY Communities

DAC and SDAC Communities  
With A Single Active Water Source  
Or Water Quality Problems

### Legend

-  Tulare Lake Basin
-  County
-  Source Exceeded MCL for either Arsenic, Uranium, Nitrate or Half Nitrate (2008-10)
-  1 Active Water Source Identified
-  City
-  Community (Non-Incorporated)
-  Major Road
-  Highway / Interstate
-  Major Canal

# DRAFT



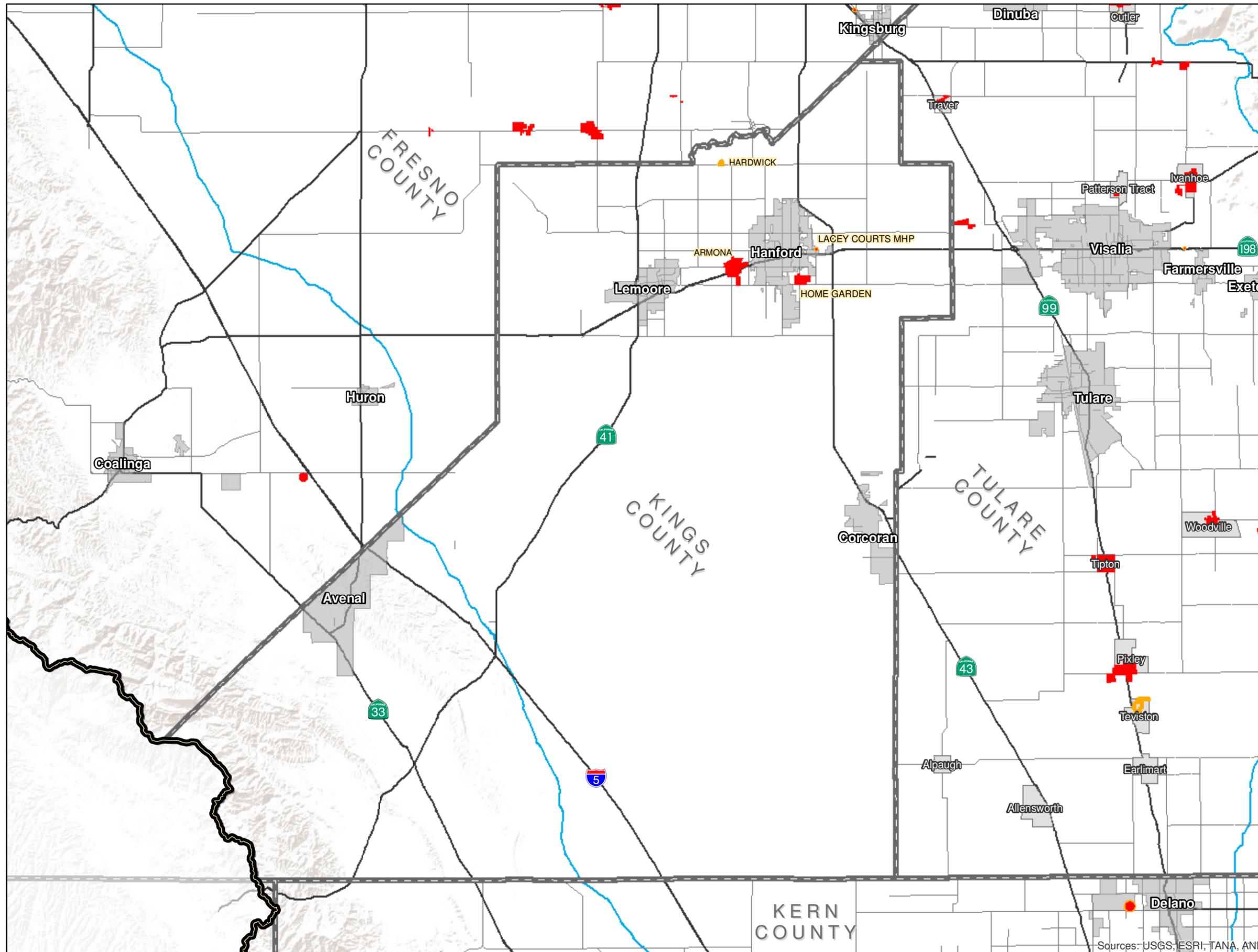
**MAP  
VIEW  
EXTENT**



EST. 1968  
**PROVOST &  
PRITCHARD**  
CONSULTING GROUP  
*An Employee Owned Company*

286 W. Cromwell Ave.  
Fresno, CA 93711-6162  
(559) 449-2700

Sources: USGS, ESRI, TANA, AND



# Tulare Lake Basin Disadvantaged Community Water Study

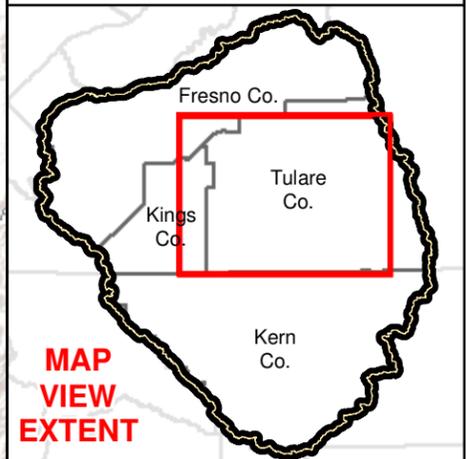
## TULARE COUNTY Communities

DAC and SDAC Communities  
With A Single Active Water Source  
Or Water Quality Problems

### Legend

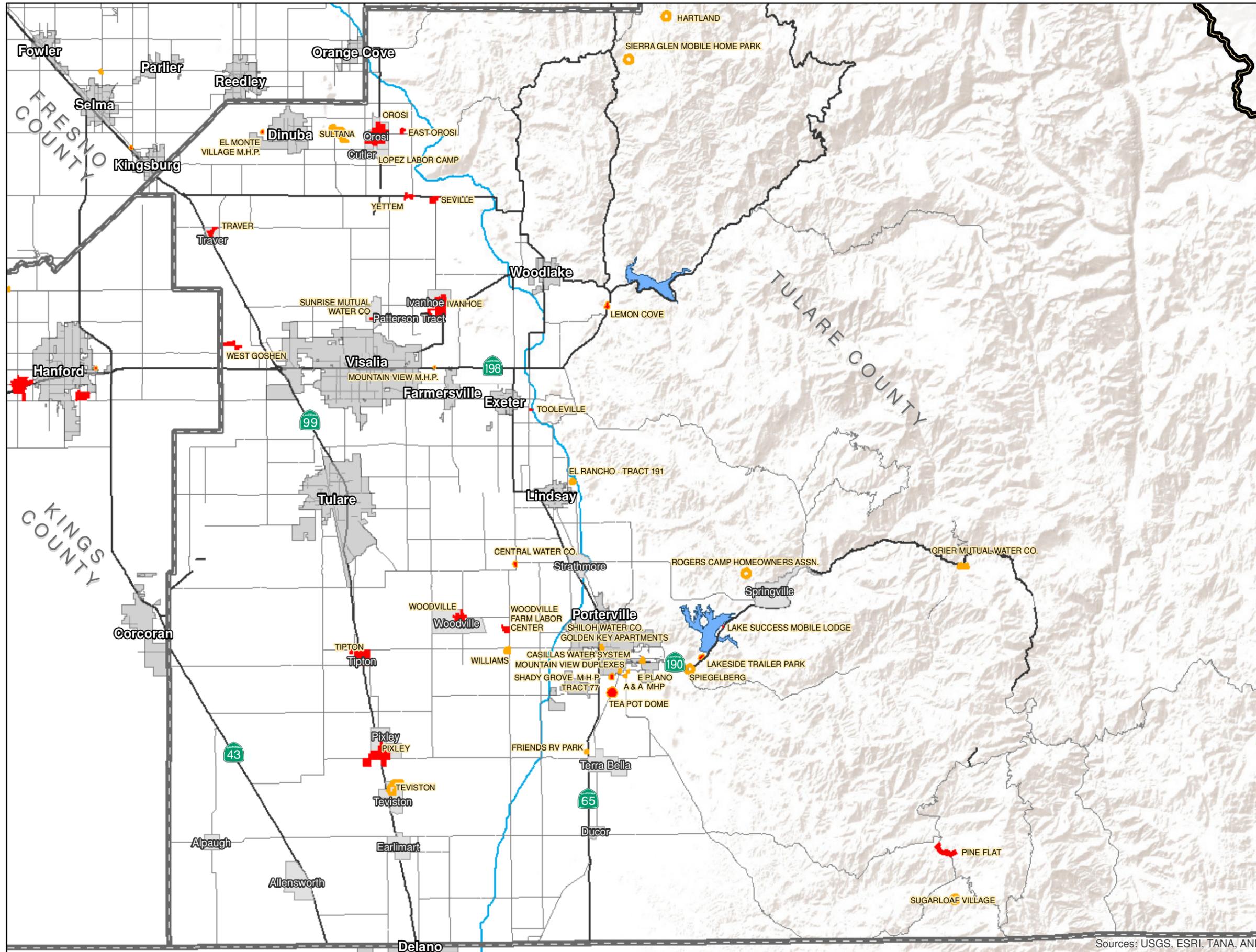
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**APPENDIX C**  
**COMMUNITY DESCRIPTIONS**

DRAFT

## COMMUNITY DESCRIPTIONS SUMMARY

This document provides summary descriptions of various communities within the community size categories used in the Management and Non-Infrastructure Solutions Pilot Report. The community size categories are: communities with 50 or fewer connections; communities with between 51 and 200 connections, communities with between 501 and 2,000 connections, and communities with greater than 2,000 connections. The communities described herein were selected as representative communities of the various size ranges within the Tulare Lake Basin. This section is not, by any means, meant to be fully inclusive of all communities within the region.

This summary section will be followed by complete profiles of each of the communities summarized herein.

### 1 Communities with 50 or Fewer Connections

#### 1.1 Hardwick Mutual Water Company

Location: Kings County

Number of Connections: 20

Median Household Income: \$23,000 – 37.8% of Statewide MHI (2010 Survey conducted by Self-Help Enterprises)

Monthly Water Rate: \$40 per month

Monthly Sewer Rate: N/A (individual septic systems)

Population Served: 138 - Primarily low-income, farm-workers, and/or on a fixed income

Problem(s) (Quantity/Quality):

Uranium and Gross Alpha – MCL violations

One operating well

Challenges: By-products from the Uranium treatment process may be considered both hazardous and radioactive wastes and as such regulated by the Hazardous Waste and Nuclear Regulatory Commission

Solution(s):

Hardwick received a CDPH Proposition 84 Planning Grant Funding Agreement on December 28, 2012. The grant will fund the drilling of a water test well and the design of a new production well for the community. If the test well is unsuccessful in identifying an adequate supply of potable water, a uranium treatment process would be designed.

Additional funding will be needed (possibly from USDA) to cover costs related to replacing the water system's antiquated distribution system and connecting homes in the community to the water system that are currently served by contaminated private domestic wells.

## 2 Communities with 51 to 200 Connections

### 2.1 Allensworth Community Services District

Location: Tulare County

Number of Connections: 100 (metered water only, no sewer)

Median Household Income: \$24,375 (+/- \$7,504) – 39.5% of Statewide MHI (2007-2011 American Community Survey for Allensworth Census Designated Place)

Monthly Water Rate: \$42 per month base rate, with a metered rate that begins at \$0.72 per CCF, scaling up to \$2.00 per CCF after 15,000 CCF of usage

Monthly Sewer Rate: N/A

Population Served: 471

Problem(s) (Quantity/Quality):

Arsenic – MCL violations (slightly over) from both system wells

Periodic bacteriological contamination, likely originating in the storage facility

Limited capacity

Challenges:

Capacity is limited by insufficient storage

Board-imposed moratorium has severely restricted growth, eliminating opportunities for increased revenues through expansion

The system experiences occasional service disruption due to issues such as electrical control failures, storage limitations and booster pump failure

Small, impoverished rate payer base; severely limited revenues and no reserve funds

Rate structure that includes a high water use allowance

Lack of highly qualified system operator; manager holds a D1 license but has limited experience and capability; manager is also responsible for all office work

Solution(s):

Restructure rate schedule to encourage water conservation and generate additional revenue from high water users

Regional project; currently investigating the feasibility of a regional solution for Allensworth and Alpaugh, building on a potential partnership with Angiola Water District

Capital improvements including replacement water sources, replacement of storage tank and improved booster pump controls

## 2.2 East Orosi Community Services District

Location: Tulare County

Number of Connections: 105 (water-metered and sewer)

Median Household Income: \$29,063 – 50.7% of Statewide MHI (2006-10 American Community Survey for East Orosi Census Designated Place)

Monthly Water Rate: \$17 per month

Monthly Sewer Rate: \$50 per month

Population Served: 495

Problem(s) (Quantity/Quality):

Nitrate – MCL violations (at times) from both system wells

Bacteriological contamination

Challenges: The largest unresolved water problem for EOCS D is how to deal with intermittent high nitrate levels in the water produced from the community's two water supply wells. Well rehabilitation work funded by DWR under the IRWMP program will determine if modifications to the system's East Well will solve the problem. Project Feasibility Study funds from CDPH will subsequently be used to conduct a similar modification to the West Well if work on the East Well is successful. CDPH is willing to fund an investigation of supplying water to East Orosi through an intertie with Orosi if additional capacity can be provided.

Solution(s):

East Orosi CSD was awarded an IRWMP grant to rehabilitate the East Well. The project is currently under way. The District executed a CDPH Proposition 84 Planning Grant Funding Agreement on November 19, 2012 to evaluate the Orosi intertie option and potentially rehabilitate the West Well.

Other:

Wastewater is transported to the Cutler-Orosi Joint Wastewater Powers Authority Treatment Plant roughly four miles away. However, the sewer collections system consists of small diameter sewer lines and utilizes septic tanks to remove solids. Only the septic tank effluent that would have otherwise gone to a leach line is conveyed off the property to the District's gravity sewer collection system, then on to a lift station that pumps the effluent through a force main to the Cutler-Orosi Treatment facility. The District has easements on each property to enter and pump septic tanks to remove solids when necessary. Since there are no solids in the collection system, it was constructed of smaller sized pipes and cleanouts exist where otherwise manholes would exist.

The District has a contract with the Cutler-Orosi Wastewater Joint Powers Authority (JPA) for that agency to treat and dispose of East Orosi's wastewater. East Orosi is not a member of that Board, and therefore pays the required fees with no vote on the overall budget of the JPA (which sets the fees). The District is also limited in its

ability to get new connections, as the members of the JPA have priority and set the rules on how much new capacity other districts qualify for, and the respective costs.

### 2.3 Plainview Mutual Water Company

Location: Tulare County

Number of Connections: XXX (water only, no sewer)

Median Household Income: \$15,500 – 25.5% of Statewide MHI (2010 Survey conducted by Self-Help Enterprises)

Monthly Water Rate: \$35 per month

Monthly Sewer Rate: N/A

Population Served: Primarily low-income, farm-working community and some elderly on fixed incomes. Mostly Hispanic (92%).

Problem(s) (Quantity/Quality):

Despite the fact that the MWC almost totally reconstructed the water system in 2008, the system's backup well, drilled in the late 1940s, has recently tested over the MCL for nitrate. In addition, in 2012, the MWC purchased the adjacent "Central Water System" (a small private water system) which has a single well source. The well is producing water over the nitrate MCL and the distribution system is deteriorated.

Challenges: Securing an affordable funding source to resolve problems listed above

Solution(s):

Construct a second reliable source of potable water (potentially a new water well) that can serve Plainview, both in the traditional boundaries of the MWC east of Road 196 and in the old "Central Water System" area west of Road 196. Interconnect the two systems into one consolidated system and replace the deteriorated distribution system and install meters west of Road 196.

### 2.4 Delft Colony Water System and WWTF (Tulare County RMA)

Location: Tulare County

Number of Connections: 102

Median Household Income: \$27,857 – 58.7% of Statewide MHI (2000 Census for Tulare County Census Tract 3.01, Block Group 5)

Monthly Water Rate: \$45.75 per month

Monthly Sewer Rate: \$49 per month

Population Served: 454

Problem(s) (Quantity/Quality):

Challenges:

Solution(s):

Other: The County of Tulare contracts with Water Dynamics, Inc. to oversee the operations and maintenance of the Delft Colony water distribution system and WWTF.

## 2.5 El Rancho Sewer System (Tulare County RMA)

Location: Tulare County

Number of Connections: Approx. 26 (sewer only)

Median Household Income: \$19,702 – 41.5% of Statewide MHI (2000 Census for Tulare County Census Tract 25, Block Group 4)

Monthly Water Rate: N/A

Monthly Sewer Rate: \$67 per month

Population Served: Approx. 124

**Problem(s) (Quantity/Quality):**

**Challenges:**

**Solution(s):**

Other: El Rancho Sewer System delivers sewage from El Rancho subdivision to the City of Lindsay. The County of Tulare contracts with the City of Lindsay to oversee the operation and maintenance of the El Rancho system through Tulare County Board of Supervisor's Agreement Number 14602.

## 2.6 Seville Sewer System (Tulare County RMA)

Location: Tulare County

Number of Connections: 159 residential connections (sewer only)

Median Household Income: \$

Monthly Water Rate: N/A

Monthly Sewer Rate: Seville - \$59.75

Population Served: Approx. 650

**Problem(s) (Quantity/Quality):**

**Challenges:**

**Solution(s):**

Other: Seville sewer lift station pumps sewerage to the Yettem sewer lift station, which delivers wastewater to the Cutler-Orosi Wastewater Treatment Facility. Each lift station facility (Seville and Yettem) pays a monthly fee to the Cutler-Orosi Joint Powers Wastewater Authority to use its treatment plant. The fees are based on the number of connections for each facility. Currently the monthly fees are \$1,091.42 for Yettem and 1,575.05 for Seville.

## 2.7 Yettem Sewer System (Tulare County RMA)

Location: Tulare County

Number of Connections: 159 residential connections (sewer only)

Median Household Income: \$34,935 +/- \$8,635 – 56.7% of Statewide MHI (2007-11 American Community Survey for Tulare County Census Tract 6, Block Group 4) [Data for Yettem Census Designated Place has too small a sample to be reliable]

Monthly Water Rate: N/A

Monthly Sewer Rate: Yettem - \$92.50

Population Served: Approx. 650

**Problem(s) (Quantity/Quality):**

**Challenges:**

**Solution(s):**

Other: Seville sewer lift station pumps sewerage to the Yettem sewer lift station, which delivers wastewater to the Cutler-Orosi Wastewater Treatment Facility. Each lift station facility (Seville and Yettem) pays a monthly fee to the Cutler-Orosi Joint Powers Wastewater Authority to use its treatment plant. The fees are based on the number of connections for each facility. Currently the monthly fees are \$1,091.42 for Yettem and 1,575.05 for Seville.

## **2.8 Tonyville Sewer System to City of Lindsay (Tulare County RMA)**

Location: Tulare County

Number of Connections: 66 residential connections

Median Household Income: \$30,278 – 63.8% of Statewide MHI (2000 Census for Tulare County Census Tract 25, Block Group 3) [A community survey would likely determine a lower MHI for the community]

Monthly Water Rate: N/A

Monthly Sewer Rate: \$54.50

Population Served: Approx. 316

**Problem(s) (Quantity/Quality):**

**Challenges:**

**Solution(s):**

Other: The Tonyville Sewer System delivers wastewater to the City of Lindsay's WWTF. The County of Tulare contracts with the City of Lindsay to oversee the operations and maintenance of the Tonyville lift station through the Tulare County Board of Supervisor's Agreement Number 17195.

## **2.9 Tooleville Wastewater Treatment Facility (Tulare County RMA)**

Location: Tulare County

Number of Connections: 70 residential connections

Median Household Income: \$25,882 (+/- \$11,659) – 42.0% of Statewide MHI (2007-11 American Community Survey for Tooleville Census Designated Place)

Monthly Water Rate: N/A

Monthly Sewer Rate: \$59.25

Population Served: 339

**Problem(s) (Quantity/Quality):**

**Challenges:** Despite high user charges, the system has operated at a deficit for many years. Attempts by Tulare County RMA to increase the service charge have been repeatedly blocked by residents under Proposition 218.

Solution(s):

Other: The County of Tulare contracts with Water Dynamics, Inc. to oversee the operations and maintenance of the Tooleville WWTF.

## **2.10 Traver Wastewater Treatment Facility (Tulare County RMA)**

Location: Tulare County

Number of Connections: 178 residential, 4 churches, 2 commercial, 2 small schools

Median Household Income: \$39,375 (+/- \$9,739) – 63.9% of Statewide MHI (2007-11 American Community Survey for Traver Census Designated Place)

Monthly Water Rate: N/A

Monthly Sewer Rate: \$35.75

Population Served: 713

**Problem(s) (Quantity/Quality):**

**Challenges:**

Solution(s):

Other: The County of Tulare contracts with Water Dynamics, Inc. to oversee the operations and maintenance of the Traver WWTF. A computerized maintenance program schedules preventative maintenance work orders, organizes area maintenance activities, and records historical data about the system.

## **2.11 Wells Tract Water Distribution System (Tulare County RMA, City of Woodlake is the Purveyor)**

Location: Tulare County

Number of Connections:

Median Household Income: \$37,250 – 78.4% of Statewide MHI (Year 2000 Census for Tulare County Census Tract 7.02, Block Group 2) [A community survey would likely determine a lower MHI for the community]

Monthly Water Rate: \$29.50 per month

Monthly Sewer Rate: N/A

Population Served: Approx. 275

**Problem(s) (Quantity/Quality):**

**Challenges:**

Solution(s):

Other: The City of Woodlake is the purveyor of water and Tulare County RMA is the Collection System Owner.

## **2.12 Wells Tract Sewer System to City of Woodlake (Tulare County RMA)**

Location: Tulare County

Number of Connections: 59 residential connections

Median Household Income: \$37,250 – 78.4% of Statewide MHI (2000 Census for Tulare County Census Tract 7.01, Block Group 2) [A community survey would likely determine a lower MHI for the community]

Monthly Water Rate: N/A

Monthly Sewer Rate: \$62.50

Population Served: Approx. 275

Problem(s) (Quantity/Quality):

Challenges:

Solution(s):

Other: The County of Tulare contracts with Water Dynamics, Inc. to oversee the operations and maintenance of the Wells Tract Sewer Lift Station. A computerized maintenance program schedules preventative maintenance work orders, organizes area maintenance activities, and records historical data about the system.

## **2.13 Yettem Water System (Tulare County RMA)**

Location: Tulare County

Number of Connections:

Median Household Income: \$34,935 +/- \$8,635 – 56.7% of Statewide MHI (2007-11 American Community Survey for Tulare County Census Tract 6, Block Group 4) [Data for Yettem Census Designated Place has too small a sample to be reliable]

Monthly Water Rate: \$56 per month

Monthly Sewer Rate: N/A

Population Served: 211

Problem(s) (Quantity/Quality):

Challenges:

Solution(s):

Other:

# **3 Communities with 201 to 500 Connections**

## **3.1 Alpaugh Community Services District**

Location: Tulare County

Number of Connections: 350

Median Household Income: \$22,875 (+/- \$4,288) – 37.1% of Statewide MHI (2007-11 American Community Survey for Alpaugh Census Designated Place)

Monthly Water Rate: Base rate of \$45 per month for water users who use 10,000 gallons or less per month; users who use between 10,001 gallons and 25,000 gallons will be charged \$55 per month; all usage above 25,000 gallons per month will be charged \$3.00 per 1,000 gallons. Customers in the Alpaugh Irrigation District (AID) area pay an additional \$10 per month toward USDA financing that paid for the Well 1 project. Tulare County Water Works District customers (within the townsite) are assessed this loan repayment fee on their property taxes via Measure R, approved in 2000.

Monthly Sewer Rate: N/A

Population Served: **Approx. 900**

Problem(s) (Quantity/Quality):

Arsenic – MCL violations

Challenges: AID Well 10 and AJPA Well 1 were drilled in 2003 and 2006, respectively, to address Alpaugh's long-time arsenic contamination. Unfortunately the regulatory standard changed in the midst of the creation of the AJPA and the construction of the new wells; hence the new wells went out of compliance shortly after being constructed. Therefore, the newly formed Alpaugh Community Services District is still seeking a way to provide compliant drinking water to their customers.

Solution(s):

The water system's arsenic treatment pilot study (currently underway, scheduled to complete Phase 2 in early 2014) may reveal helpful strategies for other communities, but as local water chemistry is so specific, results will not translate clearly for other areas. The previous formation of the AJPA is a strategy that could be employed in other areas, but with some lessons learned, such as the inclusion of a tie-breaking vote (e.g. a seventh "at large" member). Lessons can be learned from the voter approved (November 2012) formation of the Alpaugh Community Services District, and the subsequent dissolution of the AJPA and century old Tulare County Water Works District #1.

One solution that is due to be explored via a Tulare County Strategic Growth Council grant is a potential interconnection between Angiola Water District, Alpaugh, and Allensworth. The Angiola WD is owner of two wells that are virtually arsenic-free, a rare commodity in the Corcoran-Alpaugh-Allensworth area. This would be an unusual partnership involving an irrigation district, and may involve some kind of exchange or a blending solution. Angiola WD is not seeking to sell water to Alpaugh (they would prefer to sell the existing well sites and be made whole with replacement sources), but wholesale supply might be an option.

### **3.2 Pratt Mutual Water Company (Matheny Tract)**

Location: Tulare County

Number of Connections: 276

Median Household Income: \$29,605 (+/- \$8,216) – 48.0% of Statewide MHI (2007-11 American Community Survey for Matheny Census Designated Place)

Monthly Water Rate: \$40 per month unmetered. There is a seasonal adjustment of \$5 per month additional fee during the summer months.

Monthly Sewer Rate: N/A

Population Served: Approx. 1,200

Problem(s) (Quantity/Quality):

Single active well (Well 3)

Arsenic – MCL violations

Nitrates – MCL violations

Well 2 was condemned due to nitrate contamination (2002)

Well 1 was put on standby status in 2009 due to nitrate contamination

Well 1 and Well 3 both have arsenic contamination in excess of the MCL

Challenges: The mutual has had sporadic problems with getting enough stakeholder participation (in this case property owners) to carry out director elections.

Solution(s):

Matheny Tract has had success in working with the City of Tulare for consolidation. A water system consolidation (no annexation, but the City will own and operate the water system) is planned for a 2013 construction start. Planning activities and construction funding is provided by CDPH through the Proposition 84 and Drinking Water State Revolving Fund programs.

Through the assistance of Tulare County, Matheny Tract residents will be considering the possibilities of constructing a sewer collection system that would also connect to the City of Tulare. The City's wastewater treatment plant is located near the community, and there is a new industrial waste trunkline in Pratt Street, adjacent to the community. Planning money is on its way for a sewer system project. This will be funded in part by the Strategic Growth Council and in part by the Clean Water State Revolving Fund (all grant).

## **4 Communities with 501 to 2,000 Connections**

### **4.1 Caruthers CSD**

Location: Fresno County

Number of Connections: 672

Median Household Income: \$29,750

Monthly Water Rate:

Monthly Sewer Rate:  
Population Served: 2,103  
Problem(s) (Quantity/Quality):  
Challenges:  
Solution(s):  
Other:

#### **4.2 Riverdale PUD**

Location: Fresno County  
Number of Connections: 930  
Median Household Income: \$29,886  
Monthly Water Rate:  
Monthly Sewer Rate:  
Population Served: 3,000  
Problem(s) (Quantity/Quality):  
Challenges:  
Solution(s):  
Other:

#### **4.3 Armona CSD**

Location: Kings County  
Number of Connections: 1,179  
Median Household Income: \$32,790  
Monthly Water Rate:  
Monthly Sewer Rate:  
Population Served: 3,239  
Problem(s) (Quantity/Quality):  
Challenges:  
Solution(s):  
Other:

#### **4.4 Pixley PUD**

Location: Tulare County  
Number of Connections: 800  
Median Household Income: \$35,759  
Monthly Water Rate:  
Monthly Sewer Rate:  
Population Served: 3,310  
Problem(s) (Quantity/Quality):  
Challenges:  
Solution(s):  
Other:

## **4.5 Richgrove CSD**

Location: Tulare County  
Number of Connections: 600  
Median Household Income: \$28,261  
Monthly Water Rate:  
Monthly Sewer Rate:  
Population Served: 2,882  
Problem(s) (Quantity/Quality):  
Challenges:  
Solution(s):  
Other:

## **5 Communities with Greater than 2,000 Connections**

### **5.1 Lamont PUD**

Location: Kern County  
Number of Connections: 3,500  
Median Household Income: \$33,799  
Monthly Water Rate:  
Monthly Sewer Rate:  
Population Served: 15,120  
Problem(s) (Quantity/Quality):  
Challenges:  
Solution(s):  
Other:

### **5.2 East Niles CSD**

Location: Kern County  
Number of Connections: 7,338  
Median Household Income:  
Monthly Water Rate:  
Monthly Sewer Rate:  
Population Served: 24,900  
Problem(s) (Quantity/Quality):  
Challenges:  
Solution(s):  
Other:

**COMMUNITY PROFILES**

DRAFT

## Community Profiles

(December 5, 2012)

Community	Entity	County	Water Service	Sewer Service	Range of Connections					
					<15	15-50	51-200	201-500	501-2000	>2000
Akin	Private	Tulare	XXX			XXX				
Allensworth	CSD	Tulare	XXX				XXX			
Alpaugh	District	Tulare	XXX					XXX		
Beverly Grand	MWC	Tulare	XXX			XXX				
East Orosi	CSD	Tulare	XXX	XXX			XXX			
Fairways Tract	MWC	Tulare	XXX	X			XXX			
Hardwick	MWC	Kings	XXX			XXX				
Kettleman City	CSD	Kings	XXX	XXX				XXX		
Lamont	PUD	Kern	XXX	XXX						XXX
Lemon Cove	District	Tulare	XXX	XXX		XXX				
Matheny Tract	MWC	Tulare	XXX					XXX		
Pixley	PUD	Tulare	XXX	XXX					XXX	
Plainview	MWC	Tulare	XXX					XXX		
Richgrove	CSD	Tulare	XXX	XXX					XXX	
Sultana	CSD	Tulare	XXX	XXX			XXX			
Teviston	CSD	Tulare	XXX				XXX			
Tooleville	MWC	Tulare	XXX	X			XXX			
Tract 92	CSD	Tulare	XXX				XXX			
West Goshen	MWC	Tulare	XXX				XXX			
London	CSD	Tulare	XXX	XXX				XXX		

# AKIN WATER SYSTEM

15-50 Connections Range  
(26 Connections)

## Location and Introduction

The Tulare County neighborhood that encompasses the neighborhood served by the Akin Water System is located just southeast of the City of Porterville.

## Information to be included for each community:

### 1. When was community established and why

The system was developed in the 1940s to serve the new development along Lincoln St. The Akin brothers (James and Bill) were developers; they set up the water company to further the development.

### 2. How old are the systems

Check Tulare County Health system file...we can show signature on CDPH nondisclosure form if that make HD more comfortable

### 3. Median household income

Per the last decennial census to calculate median household income, the 2000 Census indicated the median annual income for households in Tulare County Census Tract 41.02 Block Group 1 that incorporates the neighborhood that represents the Akin Water System, was \$28,824 or 60.7% of the statewide median household income at that time. Since then the US Census Bureau no longer asks the income question in the decennial census, but rather collects income data through the continually occurring American Community Survey where a smaller sampling is done annually. This data is expressed as a 5-year adjusted average. The median annual household income for the past two rounds is expressed as:

<u>Period</u>	<u>MHI</u>	<u>Margin of Error</u>	<u>% of State MHI</u>
2005-09	\$33,375	+/- \$9,807	55.3%
2006-10	-----not available-----		

### 4. Monthly sewer rates and water rates, if known.

There is no sewer service for residents. The neighborhood is dependent on individual septic tank systems for sewage disposal. The current water flat rate is \$30 / month. This is approximately 1% of the 2005-09 estimated median household income for the neighborhood.

**5. Billing methods for the community systems** *Does the community use the property tax rolls to collect annually or semi-annually. Other services that might be on the same bill. Are bill paid by mail or is there an office drop off point. Discuss how this works for very small communities that do not have a formal billing process.*

The Akin Water Company was formed in---. The Water Company operates its water system totally as an enterprise fund with all operating revenue generated from customer user fees. Customers pay in advance every two months. The system owner's wife generates bills, collects payments, and makes deposits to a bank account. Residents can mail or drop off payments at the owner's house, but the owner lives on the other side of town from the Lincoln St neighborhood. The owner accepts checks and money orders.

**6. Are systems in the black or in debt?**

The system carries no debt. It has little in the way of cash reserves.

In the fiscal year 2009-2010, the water system's financial situation was as follows:

<u>Description</u>	<u>Water System</u>
Cash beginning of year	\$ 3,900
Operating Income	\$ 8,175
Operating Expense	\$ 9,184
Depreciation	\$ unkn
Operating Exp (w/o Dep)	\$ 9,184
Nonoperating Revenue	\$ 0
Nonoperating Expenses	\$ 136
Cash end of year	\$ 2,755
Change In Net Assets	\$ (1,145)

**6. Are systems run as a business or are the systems dealt with more issue by issue as they come**

The system is run as a business; in fact, it is a business, though not a profitable one.

**7. Range of household budgets in the community** *Discuss how much is spent on utilities such as sewer and water, if known. Are there discretionary funds in the typical households. If water or sewer rates go up what might get cut.*

Akin Water System represents an area that is severely disadvantaged, with 2005-09 ACS MHI indicating an MHI of 55% of the statewide MHI. The 2006-10 ACS indicates the following range of household incomes in the community:

_____, California	Annual Household Income Estimate	Margin of Error
Less than \$10,000		
\$10,000 to \$14,999		
\$15,000 to \$24,999		
\$25,000 to \$34,999		
\$35,000 to \$49,999		
\$50,000 to \$74,999		
Median income (dollars)		

An estimated \_\_\_\_% of households have annual incomes less than \$25,000 and \_\_\_\_% of households have annual incomes less than \$35,000. As such, there is very little disposable income in the community.

**8. Population served**

The Akins Water Company serves 26 dwellings with a population of approximately 85 persons.

**9. Short description of water systems and sewer systems including number of connections adequacy of backup systems and MCL challenges if known.**

There is no community wide sewer system that serves the neighborhood provided water by the Akins Water System. The community depends on individual on-site septic tank systems for wastewater disposal.

The Akins Water System has 26 connections servicing 26 residences.

The two system water wells that supply the community produce water that violates the Nitrate MCL. As such, the Water Company has a back-up source of water though not one that provides potable water.

**10. Existing governing body such as County Service District, Public Utility District, Mutual water system, etc.**

The Akins Water Company is governed by the owner Jim Akin.

**11. Decision making process** *Is there a board of directors, designated lead home owner, long time unofficial leader, or is there a lack of good decision making process. History on this would be good.*

The water system owner makes decisions as needed to keep the system in operation. The system was originally co-owned with Mr. Akin's brother Bill (they developed the Lincoln St. neighborhood) but the brother is now deceased and Mr. Akin is sole owner.

**12. Discussion of operation and maintenance personnel for each community**

*Part-time or full time personnel, contractors used, any shared human resources with other communities or agencies.*

The water system's owner, Jim Akin, has his D1 license. He takes care of most issues with the water system. Major repairs would be farmed out to a pipe company.

**13. Discuss how district is managed such as independent manager, County personnel involved, CDPH personnel involved** *Is the California Public Utilities Commission involved on rate setting or is it a local decision?*

The water system is privately owned and decisions regarding rates rest with the owner. It is not regulated by the CPUC.

Since the Akin Water Company has less than 200 connections, the system is monitored by the Tulare County Health & Human Services Agency, Tulare County Public Health Environmental Health Division. Tulare County is the Local Primacy Agency under the State Department of Public Health in monitoring compliance for and in enforcing EPA's Safe Drinking Water Act.

**14. Discuss problems that have been solved by community that could be applied as solutions by other communities.**

Under private ownership, there has not been the need nor the opportunity for residents to band together to solve common problems.

**15. Discuss largest unresolved problems/issues for the community and what is being considered to solve these problems, if any.**

The Akin Water system has had nitrate problems since the 20\_\_.

Consolidation with the City of Porterville could be a good way to resolve the water quality problems of residents served by the Akin Water Company. The neighborhood is located adjacent to the City of Porterville and is within the city's Sphere of Influence. The City requires that adjacent unincorporated areas annex to the city and construct their water distribution system to city standards in order to receive City water service. This model has been followed recently by properties within the former Fairways Tract Mutual Water Company. A CDPH Planning Grant has been approved and work is underway on a Feasibility Study to evaluate the best options for Akin's Water Company residents to receive potable water. These efforts include initiating the annexation process.

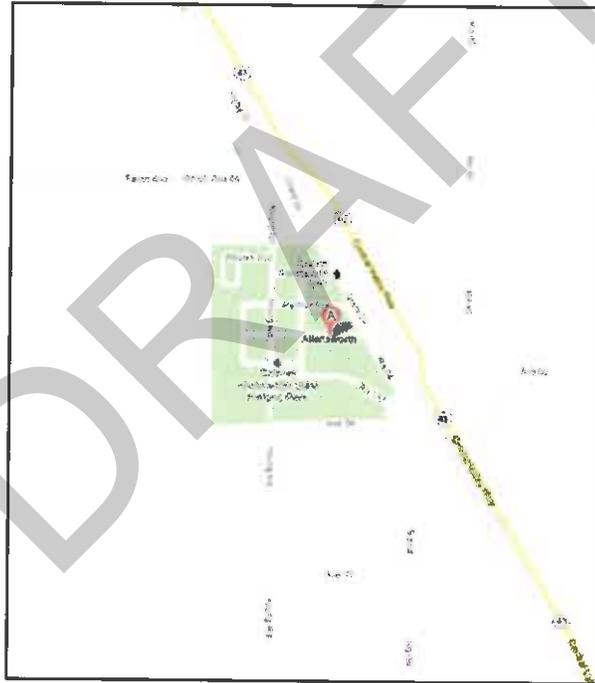
DRAFT

# ALLENSWORTH

51-200 Connections Range  
(119 Connections)

## 1. When was community established and why

The historic town of Allensworth was established in 1908 by Colonel Allen Allensworth. Lt. Col. Allensworth was born into slavery, escaped, served in the Navy during the Civil War and later served for 20 years as the chaplain to the 24<sup>th</sup> Infantry, and he dedicated his life to the improvement of circumstances for African-Americans. He founded the colony of Allensworth to provide a home for the soldiers of the country's four all-black regiments and to create a community where, free of the bonds of racism, black families could work hard, become self-sufficient and prosper. Even though this utopian community prospered for less than 20 years, it's still celebrated today for its vision and the opportunity it presented for African-Americans to gain a foothold, buy land and establish themselves as leaders and professionals.

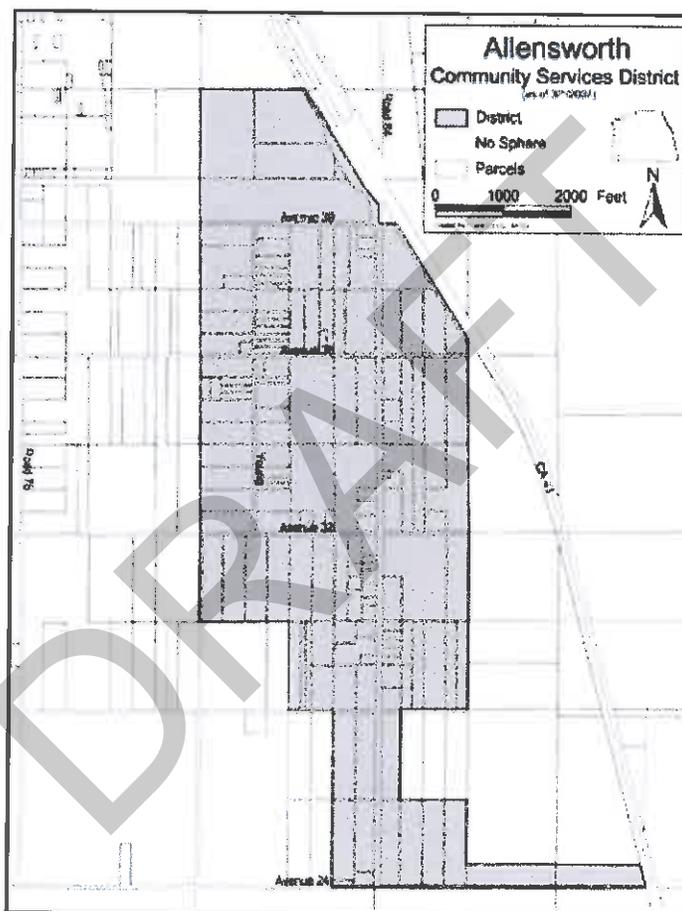


That townsite of Allensworth is now the Col. Allensworth State Historic Park. The present-day community of Allensworth is located immediately south of the old townsite, and bears little relation to the neat buildings preserved in the Park.

## 2. How old are the systems

Water has always been an issue in Allensworth. The lack of an adequate water supply was a partial cause of the utopian community's demise in the early 1900s. Up until 1966-7, community members depended on private wells for both domestic supply and

irrigation of crops. At that time, the Allensworth Membership Water Company was formed and a community water system was installed. This older system's one well still exists and is located adjacent to the current District's office on Road 84. Lyles Pipeline Company donated a trencher to the community and it was used by community volunteers to install the water distribution system. In 1980, the community reorganized the structure of water system operations and dissolved the Membership (Mutual) Water Company and formed a community services district with the later taking over the assets and liabilities of the previous company. The CSD was formed with broad powers beyond the immediate needs to provide water.



In 1984? The Allensworth Community Services District was successful in receiving a State Safe Drinking Water Bond Law grant of \$400,000 which was used to investigate and implement a new source of water supply with arsenic levels compatible with then State and federal health standards. This process included a sampling of wells within roughly a five mile radius of the community. In general, wells in and near the community were found to produce water in the 100 to 150 ppb arsenic range. However, roughly three miles to the east in an area where the Phillips Brothers pumped water that irrigated crops in Allensworth, a relatively shallow pool of "low" arsenic water was found. At the time the MCL was 50 ppb, and these easterly wells were producing well below

that level. A test well confirmed lower arsenic water above the Corcoran Clay which in this area is at a depth of about 350 feet. The resulting production well not only was low in arsenic, but did not produce water with a hydrogen sulfide odor which residents, though not pleased by its taste, had grown accustomed to. A roughly 3 and a half mile 6-inch transmission line was installed to transport water from the new well to the community. It fed a new 42,000-gallon gravity storage tank which through a bank of booster pumps pressurized a hydropneumatic tank.

In 1997, the District successfully applied for funding from USDA. USDA committed a grant of \$571,250 and loan of \$114,540. Additional grant funding was approved from the County of Tulare with HUD Community Development Block Grant funds for this \$685,790 project to drill a second well, install a larger (5,000 gallon) hydropneumatic tank and replace almost all of the water distribution system with 6-inch PVC water main. Through this project, the District installed sectionalizing gate valves, fire hydrants and new water service connections.

### 3. Median household income

Per the last decennial census to calculate median household income, the 2000 Census indicated the median annual income for households in Tulare County Census Tract 43 Block Group 1 that incorporates the community of Allensworth, was \$23,750 or 50.0% of the statewide median household income at that time. Since then the US Census Bureau no longer asks the income question in the decennial census, but rather collects income data through the continually occurring American Community Survey where a smaller sampling is done annually. This data is expressed as a 5-year adjusted average. The median annual household income for the past two rounds is expressed as:

Period	MHI	Margin of Error	% of State MHI
2005-2009	\$23,015	+/- \$4,664	38.1%
2006-2010	\$22,625	+/- \$3,635	39.5%

### 4. Monthly sewer rates and water rates, if known

There is no sewer service in Allensworth. The community is dependent on individual septic tank systems for sewage disposal. The current water rate is \$42.00/month for the first 1000 cubic feet of use, with metered rates kicking in after that (\$2 per 100CF). The CSD Board with input from a citizen's advisory committee is considering an adjustment of water rates at this time (November 2012). The estimated average monthly water bill is currently \$70 per month. This is approximately 3.7% of the 2006-10 estimated median household income for the community. The recommended new monthly rate is a base of \$42.00 (no water included) with a metered rate that begins at \$0.72 per hundred cubic feet (CCF), scaling up to \$2.00 per CCF, after 15,000 CCF of usage.

**5. Billing methods for the community systems** *Does the community use the property tax rolls to collect annually or semi-annually. Other services that might be on the same bill. Are bill paid by mail or is there an office drop off point. Discuss how this works for very small communities that do not have a formal billing process.*

The Allensworth CSD was formed after 1978's Proposition 13 and as such was not allowed to share in the distribution of property taxes collected by Tulare County. The District financially operates its water system totally as an enterprise fund with all operating revenue generated from customer user fees. Allensworth CSD staff manually reads water meters towards the end of each month and normally mails customer bills out just after the first of the following month. Customers therefore pay in arrears based on their water usage. The office manager generates bills, collects payments, and makes deposits to the Tulare County Treasurer's office in Visalia. Residents can mail or drop off payments at the ACSD office, but with no post office in town, most people drop off payments at the office. The office accepts cash, checks and money orders (?). Deposits are delivered in person to Visalia, by the manager, about once a week. The District (which utilizes the County of Tulare Treasury as its depository) pays its bills by utilizing the County's Auditor-Controller's office to issue warrants (checks). Payment vouchers and an Order to Disburse Funds are approved monthly by the Board of Directors directing the County to issue warrants. When issued, the warrants are mailed to the ACSD thence the District general manager mails the warrants to vendors. This warrant process, depending on the dates vouchers are submitted takes anywhere from 2 to 4 weeks to issue a warrant. Though somewhat time consuming, this process consists of some additional oversight and documentation for each payment issued.

**6. Are systems in the black or in debt?**

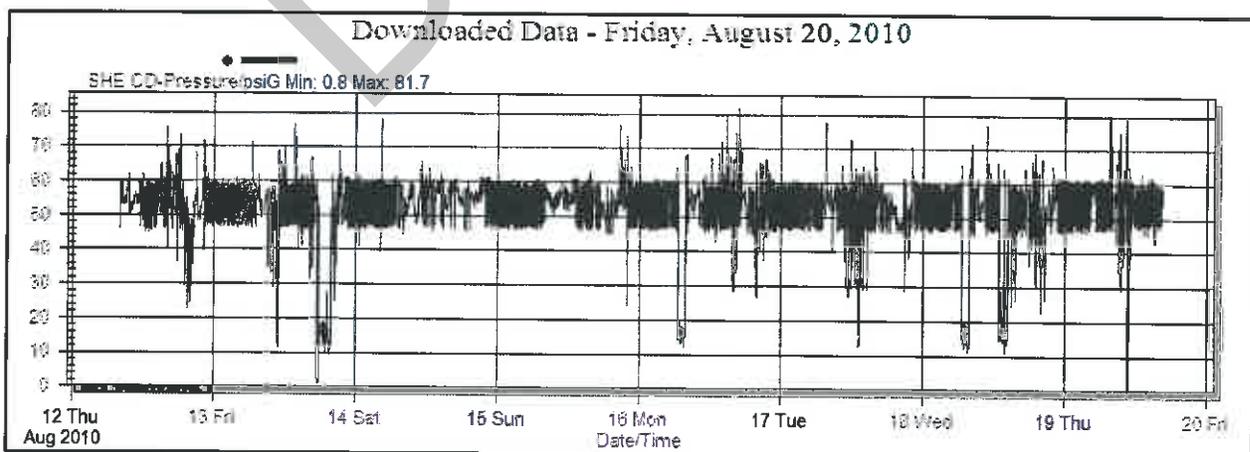
The Allensworth CSD struggles constantly in staying financially afloat. In the past ten years, the District has had to borrow money once from Tulare County and twice from Self-Help Enterprises (SHE) and to cover operational costs. One financial crisis resulted due to payment of invoices from the District's fund at Tulare County when there were insufficient funds to cover warrants issued. The County approved a loan to the District to cover this short fall which took 3 to 4 years to pay back. Twice during this period, SHE has lent the ACSD funds to cover the costs of annual audits, as they fall behind on these repeatedly. Grant money for water project development has been jeopardized (though not yet lost) due to the District's tardiness in preparing audits. The District is also paying on the USDA loan that financed the water system improvements constructed in 1999. The District has virtually no money in reserves. The District is currently (November 2012) going through hopefully the final steps in a lengthy process to receive community buy-in to a rate increase that will improve revenues to meet required expenses. This process will culminate with a Proposition 218 hearing.

In the fiscal year 2010-11, the District's financial situation was as follows:

Description	Water System
Cash beginning of year	\$ 9,463
Operating Income	\$ 109,408
Operating Expense	\$ 140,083
Depreciation	\$ 22,482
Operating Exp. (w/o Dep.)	\$ 117,601
Non-operating Revenue	\$ 495
Non-operating Expenses	\$ 0
Cash end of year	\$ (2,886)
Change in Net Assets	\$ (32,555)
Interest Paid	\$ 5,171

**7. Are systems run as a business or are the systems dealt with more issue by issue as they come?**

The ACSD District operates as a business, but has its challenges. For example, a moratorium on new service connections has been in place since 2011. This moratorium is due to the lack of water supply in summer months to meet peak demand. Prior to the District issuing this moratorium numerous new connections were allowed which resulted in reduced pressure and supply to the rest of the community, especially near the existing connections located near the new connections. The District sought to gather information that would evaluate the capacity and pressure issues and then a recommended solution with cost estimate. The following is a snap shot of pressure readings in August 2010 dipping at times below 20psi.



Unfortunately, the District has few resources to provide a technical evaluation of the problem and assessment of potential solutions. Therefore, there has been little done to reverse the moratorium, despite some pretty heated objections from the community.

Another wrinkle in this issue is that the County of Tulare has started issuing building permits along with well drilling permits to property owners that are unable to receive will serve letters from the District. As a result, new private domestic wells are being drilled in an area where it can almost be assured that arsenic levels will be in the 100 to 150 ppb range, ten to fifteen times the arsenic MCL.

A recent (2011) Municipal Services Review (MSR) by Tulare County LAFCO makes the following conclusion:

...[T]he District does not have the ability to implement traditional revenue generating mechanisms and is completely dependent [sic] on outside sources to fund even basic maintenance and operational costs. ...[T]he District faces challenges well beyond basic system operation/maintenance, meaning that any funding that is secured will not be used, at least not completely, to address the system's chronic contamination and groundwater supply issues. This approach is unsustainable and threatens the District's solvency.

**8. Range of household budgets in the community** *Discuss how much is spent on utilities such as sewer and water, if known. Are there discretionary funds in the typical households. If water or sewer rates go up what might get cut.*

Allensworth is severely disadvantaged, with 2006-10 ACS MHI indicating an MHI at less than 40% of the statewide MHI. The 2006-10 ACS indicates the following range of household incomes in the community:

Allensworth CDP, California	Annual Household Income Estimate	Margin of Error
<b>Less than \$10,000</b>	14.3%	+/- 15.5
<b>\$10,000 to \$14,999</b>	7.9%	+/- 11.1
<b>\$15,000 to \$24,999</b>	42.9%	+/- 18.6
<b>\$25,000 to \$34,999</b>	17.5%	+/- 15.6
<b>\$35,000 to \$49,999</b>	0.0%	+/- 41.5
<b>\$50,000 to \$74,999</b>	17.5%	+/- 13.9
<b>Median Income (dollars)</b>	<b>\$22,625</b>	<b>+/- \$3,635</b>

An estimated 65.1% of households have annual incomes less than \$25,000 and 82.6% of households have annual incomes less than \$35,000. As such, there is very little disposable income in the community.

Allensworth families in general don't have any room for flexibility in their budgets. There is very little local job opportunity (none at all in Allensworth, other than at the school or a few farming jobs near the community) so those who are employed have to travel to work. Many families depend on farm labor for their major source of revenue so their

incomes fluctuate seasonally. There are also many residents who depend on fixed-income sources such as disability and social security. The proposed rate increase has been an object of considerable controversy, with residents showing up in droves to community meetings, board meetings and water finance committee meetings to express the difficulty that many have in covering the expense for this basic necessity.

#### **9. Population served**

The 2010 United States Census reported that Allensworth had a population of 471. The population density was 151.8 people per square mile. The racial makeup of Allensworth was 158 (33.5%) White, 22 (4.7%) African American, 0 (0.0%) Native American, 8 (1.7%) Asian, 0 (0.0%) Pacific Islander, 279 (59.2%) from other races, and 4 (0.8%) from two or more races. Hispanic or Latino of any race were 436 persons (92.6%).

The average household size was 4.10. There were 142 housing units at an average density of 45.8 per square mile (17.7/km<sup>2</sup>), of which 56 (48.7%) were owner-occupied, and 59 (51.3%) were occupied by renters. The homeowner vacancy rate was 0%; the rental vacancy rate was 11.8%. 220 people (46.7% of the population) lived in owner-occupied housing units and 251 people (53.3%) lived in rental housing units.

#### **10. Short description of water systems and sewer systems including number of connections adequacy of backup systems and MCL challenges if known**

There is no community wide sewer system in Allensworth. The community depends on individual on-site septic tank systems for wastewater disposal. In wet years, the combination of a perched water table and tight soils creates problems for effective leaching of septic tank effluent.

The ACSD has 119 active connections servicing 116 residences, the Allensworth School (with an ADA of 74) the Allensworth Community Center and the Allensworth State Historic Park.

The two District water wells that supply the community produce water that violates the Arsenic MCL. Though, one of these wells produces water very close to the 10ppb MCL level, and fluctuates above and below the MCL. As such, the District has a back-up source of water though not one that provides potable water. Good records do not exist and much of the information that is known is in the head of the former maintenance worker, who still offers some help and services to ACSD.

#### **11. Existing governing body such as County Service District, Public Utility District, Mutual water system, etc.**

The Allensworth Community Services District provides water service to the unincorporated community of Allensworth. The District is governed by a 5-member board of directors (currently 4 members with one perpetual vacancy).

**12. Decision making process** *Is there a board of directors, designated lead home owner, long time unofficial leader, or is there a lack of good decision making process. History on this would be good.*

The Allensworth CSD Board of Directors is in charge of the decision making process related to the community's water system. This applies to policy decisions and other major decisions. The District General Manager provides the overall management of the system.

As a side note, within this small community in addition to the Community Services District Board, there is also an Allensworth Elementary School District board, a town council, and the Allensworth Progressive Association Board of Directors. Each fills its own role.

**13. Discussion of operation and maintenance personnel for each community**

*Part-time or full time personnel, contractors used, any shared human resources with other communities or agencies.*

The District has one full-time (30-hour) general manager. Currently they are also employing a second office worker, part-time. The general manager does most of the field work, with occasional support called in (see below).

A previous maintenance system employee has been available for assistance at times when needed.

The District utilizes a pump company for repairs as needed.

**14. Discuss how district is managed such as independent manager, County personnel involved, CDPH personnel involved** *Is the California Public Utilities Commission involved on rate setting or is it a local decision?*

The District has one full-time (30-hour) general manager that is accountable to the Board of Directors. The General Manager is a certified D1 operator even though her primary job responsibilities are (at least in theory) clerical/office duties. Since help in the field is not always available, she also reads meters and manages repairs. A previous maintenance system employee has been available for assistance at times when needed. The District utilizes a pump company for repairs as needed.

Since the ACSD water system has less than 200 connections, the system is monitored by the Tulare County Health & Human Services Agency, Tulare County Public Health Environmental Health Division. Tulare County is the Local Primacy Agency under the State Department of Public Health in monitoring compliance for and in enforcing EPA's Safe Drinking Water Act.

No CPUC. Most of their functions are entirely internal (budgeting, billing, operations, etc). The exception is their banking relationship with the Tulare County Treasurer.

**15. Discuss problems that have been solved by community that could be applied as solutions by other communities.**

Allensworth has had success with a water committee that has been meeting on an ongoing basis for about a year now. The committee is able to bring together District directors & staff, community members, and other interested parties to strategize and problem-solve.

The water committee started out by making a list of problems and then setting priorities for what issues to tackle first. The committee has made numerous recommendations to the Board, and their efforts have resulted in a campaign to eliminate "double dwellers" (multiple residences served by one service connection), some preliminary engineering studies, an effort to establish policies (personnel, etc.) and the rate adjustment that is currently underway.

**16. Discuss largest unresolved problems/issues for the community and what is being considered to solve these problems, if any.**

Allensworth has had arsenic problems since the 1960s. This is a huge unresolved problem. A regional project could be a good answer for them; the Strategic Growth Council grant awarded to Tulare County in 2012 will investigate the feasibility of a regional solution for Allensworth and Alpaugh, building on a potential partnership with Angiola Water District south of Corcoran.

Allensworth's other big unresolved problem is their moratorium and the concern over insufficient water supplies.

Consolidation could be a good way to resolve Allensworth's water problems. Although it is located at a distance of several miles from Alpaugh, the two communities face similar problems with regard to economy of scale, contamination and revenue deficiencies. The Strategic Growth Council grant is a fantastic opportunity to explore this option, and should be coupled with the Tulare Lake Basin Disadvantaged Community Pilot Study to advance some solutions for the region.

The 2011 LAFCO MSR makes the following comment regarding consolidation:

One of the major obstacles to consolidation is the governance structure of the resulting entity; in particular, existing governing boards fear that the interests of their respective constituencies will no longer be advanced with the same vigor and empathy as before. This issue cannot be adequately addressed within the parameters

of an MSR; however, it should be noted that Section 61030 (a) of the CSD law allows LAFCO to increase the number of members to serve on the initial board of directors of the resulting entity from 5 to 7, 9 or 11. Terms to be served by the new board of directors can also be set by LAFCO in accordance with Section 56886 (n). The expanded board of directors can be elected by division, with division boundaries being drawn according to community boundaries to ensure that customers of existing districts continue to have adequate representation on the new board.

The Alpaugh-Allensworth area also has some unique cultural and recreational resources (e.g. BLM's Atwell Island wetland restoration project, Allensworth State Historic Park, Pixley National Wildlife Refuge), and there is budding interest in leveraging these resources to create expanded opportunity for water resource development and tourism. For example, one idea is to build a trail system over pipeline easements that could move water (and hikers/birders/cyclists) between Atwell Island and Allensworth.



# ALPAUGH

201-500 Connections Range  
(360 Connections, of which 343 are residential)

## Location and Introduction

The Tulare County community of Alpaugh is located about five miles west of State Highway 43 near the southwestern border of Tulare County with neighboring Kings and Kern counties.

## Information to be included for each community:

### 1. When was community established and why

Near what was the southeastern end of Tulare Lake, a large island owned by Visalia Judge Atwell was known as Atwell's Island. The town of Alpaugh was established where this island previously existed. In 1905 a group of Los Angeles investors obtained control of the 8,861 acre Atwell Island and sold small tracts of land. At the time there was trouble in getting a good supply of water. A school district was formed in 1906, a church and school built along with residential structures. Initially artesian wells could supply small amounts of water. Later dual purpose wells were drilled for water for irrigation and natural gas for cooking and heating. Sometime after 1913 the Santa Fe Railroad constructed an eight mile spur line from its main line to the east. The community became a hub for agricultural shipping at that point. *(source: History of Tulare and Kings Counties, California, Eugene Menefee and Fred Dodge, by Historic Record Company, Los Angeles, CA 1913).*

### 2. How old are the systems.

Much of the District's water distribution system was constructed over 70 years ago. (The Tulare County Waterworks District, the original potable water provider to the townsite of Alpaugh, was formed in 1919.) The pipeline system consists of steel and transite and plastic pipe varying in size from 2 to 8 inches in diameter. The community's water source consists of one of 2 wells about a mile southeast of the community that is owned and operated by the Alpaugh Irrigation District. None of the District services have water meters. Water exceeds State and Federal standards for color and odor and arsenic. Bacterial contamination of the water distribution system has also occurred. In the warmer months, water pressure dips below 20psi during the day failing State minimal pressure standards and causing the local school to close when there is insufficient pressure to flush toilets. The existing distribution system has suffered numerous breaks and line repairs must be done with caution due to septic tank

effluent in proximity to portions of the pipeline. These frequent leaks, often in close proximity to septic tank systems with low-pressure conditions, create a potential health hazard to Alpaugh's water consumers. Well 10 was drilled 2003; Well 1 was drilled 2006, along with the storage tank and replacement of about 50% of the distribution system pipeline. More was replaced in 2011, including major rehabilitation of the line connecting Well 10 to the storage tank at the Well 1 well site. The older pipeline (which extends far outside the townsite to customers formerly served by AID, see governance comments below) dates back \_\_\_\_\_ years.

### 3. Median household income.

Per the last decennial census to calculate median household income, the 2000 Census indicated the median annual income for households in Alpaugh Census Designated Place (CDP) that incorporates the community of Alpaugh and portions the surrounding area was \$23,688 or 49.9% of the statewide median household income at that time. Since then the US Census Bureau no longer asks the income question in the decennial census, but rather collects income data through the continually occurring American Community Survey where a smaller sampling is done annually. This data is expressed as a 5-year adjusted average. The median annual household income for the past two rounds is expressed as:

<u>Period</u>	<u>MHI</u>	<u>Margin of Error</u>	<u>% of State MHI</u>
2005-09	\$21,613	+/- \$3,725	35.8%
2006-10	\$24,688	+/- \$5,772	43.1%

### 4. Monthly sewer rates and water rates, if known.

No sewer. Water rates are \$55 per month; customers in the AID area pay an additional \$10 per month toward the USDA financing that paid for the Well 1 project. TCWWD customers (within the townsite) are assessed this loan repayment fee on their property taxes via Measure R, approved in 2000.

In addition, there is a metered rate structure in place; see attached "Agreement to the Settlement".

### 5. Billing methods for the community systems.

*Does the community use the property tax rolls to collect annually or semi-annually. Other services that might be on the same bill. Are bill paid by mail or is there an office drop off point. Discuss how this works for very small communities that do not have a formal billing process.*

AJPA sends out bills monthly through the USPS on postcards, which were a cost-saving measure over stamped envelopes. Customers can pay through the mail or by coming into the office, which is open four days per week. Office staff collects bills, and takes deposits to a commercial bank in Corcoran.

**6. Are systems in the black or in debt?**

The only current debt is USDA debt for the **Well 1/Well 10 projects(?)**; annual payments are approximately \$25,000. In general, AJPA operates in the black but margins are usually narrow and historically, a system emergency equals a fiscal crisis. Since the last rate increase three years ago, AJPA has been building up reserve funds and repaying funds borrowed from their capacity fund (capital improvement reserve funded capacity fees paid at new connections). AJPA is constantly looking for ways to save money and improve efficiency. Besides billing on postcards, they have recently switched chlorine vendors, saving about 50% of their chlorine bill; they also bought a Kubota work vehicle that consumes far less fuel than their regular truck. They would like to move out of the rented office at the memorial building in favor of a modular office building installed at the well 1 site (which also serves as the yard), but have been stymied by zoning problems. It is hoped that the upcoming establishment of a Community Services District, if it's approved in November, will contribute to improved efficiency and stability.

**7. Are systems run as a business or are the systems dealt with more issue by issue as they come up?**

See previous comments.

**8. Range of household budgets in the community** *Discuss how much is spent on utilities such as sewer and water, if known. Are there discretionary funds in the typical households. If water or sewer rates go up what might get cut.*

Alpaugh is severely disadvantaged, with 2006-10 ACS MHI indicating an MHI of approximately 43% of the statewide MHI. The 2006-10 ACS indicates the following range of household incomes in the community:

Alpaugh CDP, California	Annual Household Income Estimate	Margin of Error
Less than \$10,000	10.4%	+/-7.9
\$10,000 to \$14,999	10.4%	+/-7.9
\$15,000 to \$24,999	29.9%	+/-13.0
\$25,000 to \$34,999	23.2%	+/-11.6
\$35,000 to \$49,999	7.6%	+/-6.7
\$50,000 to \$74,999	11.8%	+/-8.6
\$75,000 to \$99,999	3.3%	+/-5.5
\$100,000 to \$149,999	3.3%	+/-4.7
\$150,000 to \$199,999	0.0%	+/-17.2
\$200,000 or more	0.0%	+/-17.2
Median income (dollars)	\$24,688	+/- \$5,772

An estimated 51% of households have annual incomes less than \$25,000 and 74% of households have annual incomes less than \$35,000. The 2006-10 ACS indicates that 40.7% +/- 16.2% of Alpaugh residents live below the poverty line. As such, there is very little disposable income in the community

Alpaugh families in general don't have any room for flexibility in their budgets. Many families depend on farm labor for their major source of revenue so their incomes fluctuate seasonally. There are also many residents who depend on fixed-income sources such as disability and social security.

#### **9. Population served.**

The 2010 United States Census reported that Alpaugh had a population of 1,026. The population density was 1,020 people per square mile. The racial makeup of Alpaugh was 381 (37.1%) White, 4 (0.4%) African American, 11 (1.1%) Native American, 4 (0.4%) Asian, 0 (0.0%) Pacific Islander, 597 (58.2%) from other races, and 29 (2.8%) from two or more races. Hispanic or Latino of any race were 867 persons (84.5%).

The average household size was 4.54. There were 243 housing units at an average density of 241.8 per square mile, of which 120 (53.1%) were owner-occupied, and 106 (46.9%) were occupied by renters. The homeowner vacancy rate was 1.6%; the rental vacancy rate was 0.9%. 522 people (50.9% of the population) lived in owner-occupied housing units and 504 people (49.1%) lived in rental housing units.

#### **10. Short description of water systems and sewer systems including number of connections adequacy of backup systems and MCL challenges if known.**

There is no community wide sewer system in Alpaugh. The community depends on individual on-site septic tank systems for wastewater disposal. In wet years, the combination of a perched water table and tight soils creates problems for effective leaching of septic tank effluent.

The Alpaugh JPA provides water to \_\_\_ connections servicing 350(?) residences, the Alpaugh School (with an ADA of 303) the Tulare County Fire Station, a few commercial customers including a store and cafe and the Western Farms Fertilizer Plant located about a half mile west of the community. There is an agreement between the Authority and fertilizer plant for the plant to only draw water to fill its storage tanks at night when other system demand is low.

The water system is more or less adequate at this point, especially now that Well 10 is once again available for backup use (due to pipe repair). Until Well 10 was available,

the town was getting by on Well 1 only. Along with the 350,000 gallon ground level storage tank and booster pumps, Well 1 has been able to handle the demand. The chief problem facing Alpaugh is its consistent violation of the arsenic MCL. There is a pilot study underway to analyze the feasibility of arsenic treatment. This project, funded by CDPH / Prop 84, was inconclusive in the first attempt (and had some problems) so a second funding agreement is in the works. Alpaugh also has some hydrogen sulfide odor problems, which they address by chlorinating.

**11. Existing governing body such as County Service District, Public Utility District, Mutual water system, etc.**

This is one of Alpaugh's more unique characteristics. Currently, the system is managed by the Alpaugh Joint Powers Authority, a JPA between Alpaugh Irrigation District and Tulare County Waterworks District No. 1. Previously, TCWWD provided domestic water to residents within the 1-square-mile townsite of Alpaugh, and the AID provided domestic water to its more rural irrigation district customers for several square miles around Alpaugh. In 2003, the two agencies entered into a joint powers agreement to run the domestic water system, with each contributing its existing distribution system pipelines. AID also contributed the use its Well No. 45 (under lease to the AJPA), which exceeded even the old arsenic standard of 50 ppb. The use of this well was abandoned by the AJPA once Wells 10 and 1 were completed. AID constructed and contributed Well 10 with USDA funding. The TCWWD contributed Well 1 and its well site, also financed by USDA, along with replacement of many miles of distribution lines.

In the November 6, 2012 general election, the voters within both the AID and TCWD#1 voted by roughly a 75 to 25% majority to form the Alpaugh CSD. This new CSD will have the powers to provide domestic water to those now receiving it through the AJPA. This will allow the AID to concentrate only on irrigation water and allow the TCWWD#1 to dissolve, thus reducing three legal entities down to two with a resulting cost savings:

The Community Services District will avoid excessive overhead costs by operating with a part-time staff, which provides adequate levels of service to the community. With the dissolution of the Alpaugh Joint Powers Authority and Tulare County Waterworks District #1, the duplication of audits, legal services, bookkeeping, accounting, insurance and other charges will be reduced. The Community Services District will avoid unnecessary costs by contracting out professional services including engineering, legal services, and other consulting services. (LAFCO MSR for formation of the CSD, 2012)

**12. Decision making process** *Is there a board of directors, designated lead home owner, long time unofficial leader, or is there a lack of good decision making process. History on this would be good.*

See above for history of the AJPA formation. Per the joint powers agreement, the intent was for the Authority to be an interim measure, a step on the way to forming one public agency for the provision of water service to the entire Alpaugh area. The formation of a Community Services District was approved by voters in the November 2012 election.

The AJPA board of directors is comprised of six directors, three each from the two member agencies. All six are appointed by their parent agency and ... "serve at the pleasure of the [agency] who appointed [them] and may be replaced at any time by the [agency] who appointed them." (Joint Exercise of Powers Agreement, 2003) This has led to constant turnover and frequent partisanship, along with the obvious voting problems that come with a board comprised of an even number of directors. No provisions exist for tie-breaking votes.

The joint powers agreement also provides for an executive director appointed by the board. The executive director (ED) could be a member of the Board of Directors, or not; the ED could be the same person as the secretary and/or treasurer, or not. The joint powers agreement vested the ED with the authority to discipline employees and conduct day-to-day operation of the system. This, too, has proven problematic; sometimes the ED has been a volunteer and it's a rather large job for a volunteer to take on. The joint powers agreement did not specify the need for a general manager and so presumably meant for the ED to serve in such role. Presently there is a general manager in place whose contract identifies him as the ED, essentially combining these two roles into one. The current manager/ED is a local resident, and has been able to get everyone moving in the same direction in a much more effective manner than previous general managers hired from outside.

### **13. Discussion of operation and maintenance personnel for each community**

*Part-time or full time personnel, contractors used, any shared human resources with other communities or agencies.*

Alpaugh staffing ebbs and flows, but generally they have one general manager, two part-time office personnel, two part-time field personnel, and a slate of on-call maintenance workers. The Authority utilizes the services of Tom Day, a contracted operator, who visits about once a week for an hour or two, lending his expertise, operators' license and general support to the operation of the water system.

### **14. Discuss how district is managed such as independent manager, County personnel involved, CDPH personnel involved.**

*Discuss how district is managed such as independent manager, County personnel involved, CDPH personnel involved. Is the California Public Utilities Commission involved on rate setting or is it a local decision?*

As discussed above, AJPA employs a general manager who is a local resident. He also serves as Executive Director. With greater than 200 connections, the system is regulated by CDPH. AJPA is not subject to CPUC regulation; nor are either of its member agencies. Rate setting is a local decision arrived at by the Board of Directors and subject to Prop 218.

**15. Discuss problems that have been solved by community that could be applied as solutions by other communities.**

AJPA's arsenic treatment pilot study may reveal helpful strategies for other communities, but as local water chemistry is so specific, results will not translate clearly for other areas. The formation of the AJPA is a strategy that could be employed in other areas, but with some lessons learned, such as the inclusion of a tie-breaking vote (e.g. a seventh "at large" member).

**16. Discuss largest unresolved problems/issues for the community and what is being considered to solve these problems, if any.**

*Discuss largest unresolved problems/issues for the communities and what is being considered to solve these problems, if any.*

Wells 10 and 1 were drilled to address Alpaugh's long-time arsenic contamination. Unfortunately the regulatory standard changed in the midst of the creation of the AJPA and the construction of the new wells; hence the new wells went out of compliance shortly after being built. Therefore they are still seeking a way to provide arsenic-free drinking water to their customers.

One solution that has been floated and is due to be explored via a Tulare County Strategic Growth Council grant is a potential interconnection between Angiola Water District, AJPA, and Allensworth Community Services District. Angiola WD is owner of two wells that virtually arsenic-free, a very rare commodity in the Corcoran-Alpaugh-Allensworth area. This would be an unusual partnership involving an irrigation district, and may involve some kind of exchange or a blending solution. Angiola is not seeking to sell water to Alpaugh (they would prefer to sell the existing well sites and be made whole with replacement sources) but wholesale supply might be an option.

# BEVERLY GRAND MUTUAL WATER COMPANY

15-50 Connections Range  
(28 Connections)

## Location and Introduction

The Tulare County neighborhood that encompasses the neighborhood served by the Akin Water System is located just northwest of the City of Porterville.

### 1. When was community established and why

This suburban subdivision was mapped in the late 1950s and all the homes were built between 1958 and 1963.

### 2. How old are the systems

The Mutual Water Company was incorporated in 1958. The water system was installed in between 1955-57. All components date to that time.

### 3. Median household income

Per the last decennial census to calculate median household income, the 2000 Census indicated the median annual income for households in Tulare County Census Tract 35 Block Group 2 that incorporates the neighborhood that represents the Beverly Grand Mutual Water Company, was \$41,711 or 88% of the statewide median household income at that time. Since then the US Census Bureau no longer asks the income question in the decennial census, but rather collects income data through the continually occurring American Community Survey where a smaller sampling is done annually. This data is expressed as a 5-year adjusted average. The median annual household income for the past two rounds is expressed as:

<u>Period</u>	<u>MHI</u>	<u>Margin of Error</u>	<u>% of State MHI</u>
2005-09	\$57,083	+/- \$30,093	95%
2006-10*	\$66,896	+/- \$6,434	110%

It was suspected that the census data for the block group showed a higher income level than actually exists within the service area of the Beverly Grand MWC. Therefore, for the purposes of funding application to CDPH, a community survey was conducted by Self-Help Enterprises in January 2009. The median household income was determined by survey to be **\$29,000** (48% of 2009 CA MHI). According to the ACS, the 2009 MHI for Census Tract 35, Block Group 2 (an area that includes, but is much larger than, Beverly Grand's service area) was \$57,083. At the time of the income survey, ACS data at the block group level reported income figures that were approximately 49% higher than the actual incomes of Beverly Grand customers. ACS data should therefore be considered less than reliable for the Beverly-Grand service area.

\*Note: As of 2010, Beverly Grand is in Census Tract 35.01, Block Group 1.

**4. Monthly sewer rates and water rates, if known.**

There is no sewer service for residents. The neighborhood is dependent on individual septic tank systems for sewage disposal. The current water flat rate is \$27.50/month. This is approximately 0.5% of the 2006-10 estimated median household income for the neighborhood based on American Community Survey numbers at the block group level (see discussion in #3 above). Water rates were the same in 2009 as they are now; using the survey-determined MHI of \$29,000, water rates are 1% of area MHI.

**5. Billing methods for the community systems** *Does the community use the property tax rolls to collect annually or semi-annually. Other services that might be on the same bill. Are bill paid by mail or is there an office drop off point. Discuss how this works for very small communities that do not have a formal billing process.*

The Beverly Grand Mutual Water Company was formed in 1958. The Water Company operates its water system totally as an enterprise fund with all operating revenue generated from customer user fees. Customers are billed for two months at a time. The system's secretary generates bills, collects payments, and makes deposits to a bank account. Residents mail payments (check or money order) to the president/secretary's house in Arroyo Grande, or they can drop off cash payments at the home of the maintenance worker, who lives within the water system's service area.

**6. Are systems in the black or in debt?**

No debt.

In the fiscal year 2010-11, the water system's financial situation was as follows:

<u>Description</u>	<u>Water System</u>
Cash beginning of year	\$ 5,680
Operating Income	\$ 8,754
Operating Expense	\$ 7,917
Depreciation	\$ 0
Operating Exp (w/o Dep)	\$ 7,917
Nonoperating Revenue	\$ 0
Nonoperating Expenses	\$ 0
Cash end of year	\$ 6,517
Change In Net Assets	\$ 837

**6. Are systems run as a business or are the systems dealt with more issue by issue as they come**

Issues are dealt with as they arise, for the most part. The system is very small and in general functions well. Apart from the nitrate violation, there have been no emergencies in the past 5 years. There are no reserve funds.

**7. Range of household budgets in the community** *Discuss how much is spent on utilities such as sewer and water, if known. Are there discretionary funds in the typical households. If water or sewer rates go up what might get cut.*

The Beverly Grand Mutual water Company represents an area that is severely disadvantaged. Survey data collected in 2009 indicated a MHI of 48% of the statewide MHI. The survey results indicated the following range of household incomes in the community:

Annual Household Income Estimate	# of Beverly Grand Households
Less than \$10,000	1
\$10,000 to \$14,999	0
\$15,000 to \$24,999	8
\$25,000 to \$34,999	5
\$35,000 to \$49,999	7
\$50,000 to \$74,999	0
Median income (dollars)	29,000

An estimated 43% of households have annual incomes less than \$25,000 and 67% of households have annual incomes less than \$35,000. As such, there is very little disposable income in the community.

**8. Population served**

The Beverly Grand Mutual Water Company serves 28 dwellings with a population of approximately 100 persons.

**9. Short description of water systems and sewer systems including number of connections adequacy of backup systems and MCL challenges if known.**

There is no community wide sewer system that serves the neighborhood provided water by the Beverly Grand Water System. The community depends on individual on-site septic tank systems for wastewater disposal.

The Beverly Grand Mutual Water Company has 28 connections servicing 28 residences.

The system's only water well that supplies the community produces water that violates the Nitrate MCL. As such, the Water Company has a back-up source of water.

**10. Existing governing body such as County Service District, Public Utility District, Mutual water system, etc.**

The Beverly Grand Mutual Water Company is governed by a 3 member Board of Directors.

**11. Decision making process** *Is there a board of directors, designated lead home owner, long time unofficial leader, or is there a lack of good decision making process. History on this would be good.*

The water system's president and secretary make the day to day decisions as needed to keep the system in operation.

**12. Discussion of operation and maintenance personnel for each community**

*Part-time or full time personnel, contractors used, any shared human resources with other communities or agencies.*

The water system has a paid maintenance worker and contracts with a D1 operator. See #13 below.

**13. Discuss how district is managed such as independent manager, County personnel involved, CDPH personnel involved** *Is the California Public Utilities Commission involved on rate setting or is it a local decision?*

The water system is managed generally by the 3-member board of directors. Two of the directors, president & secretary (married couple) live now in Arroyo Grande, but retain ownership of their property in Beverly Grand. The third board member, vice-president, lives in the community. They pay a maintenance worker (who also lives in the community) to keep the well site clean and handle any maintenance issues. In addition, the water system pays a certified distribution system operator who handles

sampling, nitrate notifications and consumer confidence reports (CCRs). Bookkeeping is handled by the secretary.

Since the Beverly Grand Mutual Water Company has less than 200 connections, the system is monitored by the Tulare County Health & Human Services Agency, Tulare County Public Health Environmental Health Division. Tulare County is the Local Primacy Agency under the State Department of Public Health in monitoring compliance for and in enforcing EPA's Safe Drinking Water Act.

As a Mutual, the system is not regulated by the PUC.

**14. Discuss problems that have been solved by community that could be applied as solutions by other communities.**

The local Board and water company membership have made strides towards the eventual resolution of their nitrate problem. The MWC has successfully applied for and received a planning grant from CDPH to design a new water distribution system with an intertie to the City of Porterville's water system that would be built to standards. Negotiations have begun on the annexation of the Beverly Grand area to the City.

**15. Discuss largest unresolved problems/issues for the community and what is being considered to solve these problems, if any.**

The Beverly Grand water system has had nitrate problems since about 2004. The nitrate level first rose above the MCL around the same time that a neighboring system deepened its well. There is no proven correlation but the president and secretary believe there is a connection.

Consolidation with the City of Porterville could be a good way to resolve the water quality problems of residents served by the Beverly Grand Mutual Water Company. The neighborhood is located adjacent to the City of Porterville and is within the city's Sphere of Influence. The City requires that adjacent unincorporated areas annex to the city and construct their water distribution system to city standards in order to receive City water service. This model has been followed recently by properties within the former Fairways Tract Mutual Water Company. A CDPH Planning Grant has been approved and work is underway on a Feasibility Study to evaluate the best options for Beverly Grand's residents to receive potable water. These efforts include initiating the annexation process.

# EAST OROSI

51-200 Connections Range  
(1\_\_ Connections) **get exact #**

## Location and Introduction

The Tulare County community of East Orosi is located approximately one and a half miles east of the town of Orosi on the north side of Avenue 416.



### 1. When was community established and why.

The northern Tulare County community of East Orosi was established in 1916 by Orosi Farms. The community was located along a rail line that was built in the late 1800's. The railroad station agent's house still remains in the community on a block sized parcel located between Georgia Street and Idaho Avenue and between Fruitdale Avenue and Glendale Avenue. Old beat up sidewalks from this past era can still be found on the east-west Georgia Street (Avenue 418) in the center of the community. The southwestern entrance to the community is off of El Monte Way

(Avenue 416) along Fruitdale Avenue where an old bridge dated July 1915 crosses the Alta Irrigation Canal with the abutments marked Orosi Farms. The major employer in the community is the Fancher Creek Packers Orange Packing House located on the northwest corner of the community. A bulk propane storage and sales facility, Pope's Propane Service, is located just south of the packing house. The community's only commercial business, a small grocery/convenience store the East Orosi Market is located at the southeast corner of the community. The community is situated within Section 9 of Township 16S, Range 25E M.D.B.&M. at an elevation of approximately 385 feet.

## **2. How old are the systems.**

The East Orosi Community Services District was formed on April 19, 1955 and apparently took over the operation of an older community water system that may have been as old as the railroad. The footings of a long gone elevated water storage tank can still be found near the existing East Orosi CSD office just east of Lone Road at the intersection with Florida Avenue. The older water distribution system consisted of cast iron pipelines. In the early 1980's the District received a \$400,000 grant from the California Safe Drinking Water Bond program. This grant paid for the replacement of the entire water distribution system with 4 and 6-inch PVC water mains, the drilling of 2 test wells, 2 production wells and the equipping of those two production wells with pumps and hydropneumatic tanks. One well, the East Well, is located along the east side of Lone Road between Avenue 418 and Idaho Avenue. The other well, the West Well, is located about a half mile out of the community along Road 136.

Due to the severity of septic system leaching failures, in the late 1970's the District started the process to plan, design and build a community sewer system. The heavy soil with hard pan layers present in the community created significant problems with septic system leaching. Surfacing effluent was common and created a potential health threat. In the early 1980's the District received funding from the former Clean Water Grant Program and the USDA Farmers Home Administration to build a community sewer system and transport the wastewater to the Cutler-Orosi Joint Wastewater Powers Authority Treatment Plant roughly four miles away. In order to receive increased grant funding, the District was encouraged to install what was considered at the time as an innovative/alternative sewer collection system. This small diameter sewer system utilizes septic tanks to remove solids and only the effluent that would have otherwise gone to a leach line is conveyed off the property to the District's gravity sewer collection system, then on to a lift station that pumps the effluent through a force main to the Cutler-Orosi Treatment facility. The

District has easements on each property to enter and pump septic tanks to remove solids when necessary. Since there are no solids in the collection system it was constructed of smaller sized pipes and cleanouts exist where otherwise manholes would exist.

### **3. Median household income.**

Per the last decennial census to calculate median household income, the 2000 Census indicated the median annual income for households in East Oroquieta, was \$26,071 or 54.9% of the statewide median household income at that time. Since then the US Census Bureau no longer asks the income question in the decennial census, but rather collects income data through the continually occurring American Community Survey where a smaller sampling is done annually. This data is expressed as a 5-year adjusted average. The median annual household income for the past two rounds is expressed as:

<u>Period</u>	<u>MHI</u>	<u>Margin of Error</u>	<u>% of State MHI</u>
2005-09	\$26,163	+/- \$1,091	43.3%
2006-10	\$29,063	+/- \$8,024	50.7%

### **4. Monthly sewer rates and water rates, if known.**

The monthly flat water rate is \$17.00 dollars per month and the monthly sewer rate is \$50.00 dollars per month. This is approximately 0.7% and 2.1% respectively for water and sewer service of the 2006-10 estimated median household income for the community.

### **5. Billing methods for the community systems.**

East Oroquieta CSD mails out water and sewer utility bills to its customers on a monthly basis. Water and sewer service customers have the option of writing a check or obtaining a money order and then mailing payment to the District's post office box. The other option, which approximately 70% of customers opt for, is to pay their monthly water and sewer bills in cash each Tuesday between the hours of 3:00 and 5:00 pm.

**6. Are systems in the black or in debt?**

The amount of revenue collected to cover sewer system expenses is sufficient to cover operating costs, debt service, debt reserve and put aside approximately \$\_\_\_\_\_ annually for reserves. On the other hand, revenue generated to operate the water is not sufficient to cover costs. In the fiscal year 2008-09, the District's financial situation was as follows:

<u>Description</u>	<u>All Funds</u>	<u>Water System</u>	<u>Sewer System</u>
Cash beginning of year	\$148,697		
Operating Income		\$22,666	\$52,672
Operating Expense		\$48,210	\$83,313
Depreciation		\$16,701	\$25,416
Operating Exp (w/o Dep)		\$31,509	\$57,897
Nonoperating Revenue		\$ 606	-\$ 1,277
Cash end of year	\$135,416		

**7. Are systems run as a business or are the systems dealt with more issue by issue as they come up?**

The EOCSD District operates as a business, but has its challenges. For the past few years, the District has had difficulty in filling all of its board seats and as such having a sufficient number of board members to have the necessary quorum to conduct board meetings. In 2012 the board has filled all five seats and has conducted almost regular monthly board meetings. The District Board and management also has the goal to operate the water and sewer system finances as enterprise funds. This has been extremely challenging with the water system which normally does not receive enough revenue to cover costs.

**8. Range of household budgets in the community.**

East Orosi is severely disadvantaged, with 2006-10 ACS MHI indicating an MHI at about 50% of the statewide MHI. The 2006-10 ACS indicates the following range of household incomes in the community:

East Orosi CDP, California	Annual Household Income Estimate	Margin of Error
Less than \$10,000	0.0%	+/-49.0
\$10,000 to \$14,999	0.0%	+/-49.0
\$15,000 to \$24,999	0.0%	+/-49.0
\$25,000 to \$34,999	80.0%	+/-40.6
\$35,000 to \$49,999	20.0%	+/-40.6
\$50,000 to \$74,999	0.0%	+/-49.0
\$75,000 to \$99,999	0.0%	+/-49.0
\$100,000 to \$149,999	0.0%	+/-49.0
\$150,000 to \$199,999	0.0%	+/-49.0
\$200,000 or more	0.0%	+/-49.0
Median income (dollars)	\$29,063	+/- \$8,024

An estimated 80% of households have annual incomes less than \$35,000. The 2006-10 ACS indicates that 70% +/- 28.2% of East Orosi residents live below the poverty line. As such, there is very little disposable income in the community

A breakdown of similar household income levels for families in other Tulare Lake Basin communities shows the following budgets. There is some discretionary funding, but it is limited. If water and sewer rates increase, it is likely that the following expense categories could be impacted:

**Need Budget info from our housing folks**

**9. Population served.**

The 2010 United States Census reported that East Orosi had a population of 495. The population density was 1,996 people per square mile. The racial makeup of East Orosi was 209 (42.2%) White, 0 (0.0%) African American, 5 (1.0%) Native American, 2 (0.4%) Asian, 1 (0.2%) Pacific Islander, 261 (52.7%) from other races, and 17 (3.4%) from two or more races. Hispanic or Latino of any race were 466 persons (94.1%).

The average household size was 4.42. There were 116 housing units at an average density of 468 per square mile, of which 46 (41.1%) were owner-occupied, and 66 (58.9%) were occupied by renters. The homeowner vacancy rate was 2.1%; the rental vacancy rate was 1.5%. 192 people (38.8% of the population) lived in owner-occupied housing units and 303 people (61.2%) lived in rental housing units.

**10. Short description of water systems and sewer systems including number of connections adequacy of backup systems and MCL challenges if known.**

The EOCS D has \_\_\_ water connections servicing \_\_\_\_\_ residences, the East Orosi Market, Pope's Propane Service(?) and the Fancher Creek Orange Packers Packing House(?) (drinking water only)(?). The District also provides sewer service to all of these users with the exception of the orange packing house.(?)

East Orosi's water system is supplied from groundwater from two wells. One well, the East Well, is located along the east side of Lone Road between Avenue 418 and Idaho Avenue. The other well, the West Well, is located about a half mile out of the community along Road 136. Each well is equipped with a \_\_\_hp submersible pump that discharges into a 5,000? gallon hydropneumatic tank. Neither well has chlorination facilities. Each well can provide sufficient capacity to the system and the District has commonly operated the system with alternating one well on and the other off. As such, if one well goes down, the other well should be capable of providing backup supply. The water distribution system consists of 4 and 6-inch PVC water mains with fire hydrants and sectionalizing gate valves. The 105 water service connections are metered. Water pumped from the wells have intermittently exceeded the nitrate Maximum Contaminant Level set by EPA and CDPH. In 2011 and early 2012?, bacteriological sampling of the distribution system indicated several instances of the presence of total coliform bacteria.

East Orosi's sewer system is unique for this area. It is a small diameter sewer system which utilizes septic tanks to remove solids and only the effluent that would otherwise go to a leach line is conveyed off the property to the District's gravity sewer collection system, thence on to a lift station that pumps the effluent through a 4 mile force main to the Cutler-Orosi Treatment facility. The District has easements on each property to enter and pump septic tanks to remove solids when necessary. Since there are no solids in the collection system it was constructed of smaller sized pipes and cleanouts exist where otherwise manholes would exist. The District has a contract with the Cutler-Orosi Wastewater Joint Powers Authority for that agency to treat and dispose of East Orosi's wastewater. East Orosi is not a member of that Board and as such pays required fees with no vote on the overall budget of the JPA which sets the fees.

**11. Existing governing body such as County Service District, Public Utility District, Mutual water system, etc.**

The East Oroshi Community Services District provides water and wastewater service to the unincorporated community of East Oroshi. The District has a five member board.

**12. Decision making process:**

The East Oroshi CSD Board of Directors is in charge of the decision making process related to the community's water and wastewater systems. This applies to policy decisions and other major decisions. The District Office Manager provides the overall management of the system.

**13. Discussion of operation and maintenance personnel for each community.**

- 1 Part-time Office Manager **expand**
- 1 Part-time Grounds Person **expand**
- 1 Contracted System Operator **expand-delineate tasks in his contract**

**14. Discuss how district is managed such as independent manager, County personnel involved, CDPH personnel involved.**

The District has one part-time office manager that is accountable to the Board of Directors. It appears that the office manager fills the role of a general manager. The District lacks the resources to hire a full time manager and there is not a need for full time management.

Since the EOCSD water system has less than 200 connections, the system is monitored by the Tulare County Health & Human Services Agency, Tulare County Public Health Environmental Health Division. Tulare County is the Local Primacy Agency under the State Department of Public Health in monitoring compliance for and in enforcing EPA's Safe Drinking Water Act.

**15. Discuss problems that have been solved by community that could be applied as solutions by other communities.**

Over the years, various board members and staff have struggled yet persevered to seek resources to solve their water and sewer issues. The water system is greatly improved compared to the system the District took over in the 1950's. That said, there is still need to make improvements which the District Board is pursuing through applications to CDPH and indirectly to DWR through the IRWMP process.

The methods to be utilized and the results of the proposed well modification work to be funded by these two agencies can be useful to other communities that seek solutions to high nitrate wells.

On the wastewater side, an evaluation of the small diameter sewer collection system in comparison to a conventional gravity system would be useful in determining if the small diameter system is viable for other Tulare Lake Basin communities. In addition, an evaluation of the contract status versus member status with the Cutler-Orosi WJPA would be useful to other Tulare Lake Basin communities that wish to consider consolidation with a larger entity for wastewater treatment.

**16. Discuss largest unresolved problems/issues for the community and what is being considered to solve these problems, if any.**

-The largest unresolved water problem for East Orosi is how to deal with intermittent high nitrate levels in the water produced from the community's two wells. Well rehabilitation work funded by DWR under the IRWMP program will determine if modifications to the system's East Well will solve the problem. Project Feasibility Study funds from CDPH will subsequently be used to conduct a similar modification to the west well. There is the potential that CDPH will fund an investigation of supplying water to East Orosi through an intertie with Orosi if additional capacity can be provided.

-The District needs to do a rate analysis for the water system which is underfunded.

-The District needs to plan for the eventual increase of wastewater capacity at the Cutler-Orosi Wastewater Facility needed when the community grows. Wastewater connection fees should be sufficient set and should be aside to pay the COWJPA for this expansion. Operations reserves should also be accumulated in the wastewater fund to cover replacement of valves, air relief valves, pumps and other equipment that can be corroded by hydrogen sulfide present in the septic tank effluent that is pumped to the Cutler-Orosi facility.

# FAIRWAYS TRACT WATER COMPANY

51-200 Connections Range  
(64 Connections) **get exact #**

## Location and Introduction

The Tulare County neighborhood that encompasses the Fairways Tract Water System is located on the eastern side of the City of Porterville.

### 1. When was community established and why

This suburban subdivision was mapped in the 19\_0s and all the homes were built between \_\_\_\_\_ and \_\_\_\_\_.

### 2. How old are the systems

The "Mutual" Water Company was incorporated in \_\_\_\_\_. The prior water system was installed in between \_\_\_\_\_. Most of the original components date to that time. A second well was drilled \_\_\_\_\_. Both of the wells exceeded the MCL for nitrate. The older water system has now been abandoned and a new water distribution system with a connection to the City of Porterville system has been installed. This profile will compare the differences between the earlier water system and the newer arrangement which is a total consolidation with the City of Porterville's water system.

### 3. Median household income

Per the last decennial census to calculate median household income, the 2000 Census indicated the median annual income for households in Tulare County Census Tract 39.01 Block Group 4 that incorporates the neighborhood that represents the Fairways Tract Water Company, was \$24,250 or 51.1% of the statewide median household income at that time. Since then the US Census Bureau no longer asks the income question in the decennial census, but rather collects income data through the continually occurring American Community Survey where a smaller sampling is done annually. This data is expressed as a 5-year adjusted average. The median annual household income for the past two rounds is expressed as:

<u>Period</u>	<u>MHI</u>	<u>Margin of Error</u>	<u>% of State MHI</u>
2005-09	\$26,645	+/- \$9,246	44.1%
2006-10	\$ _____	+/- \$ _____	____%

### 4. Monthly sewer rates and water rates, if known.

Fairways Tract residents are provided sewer service by the Porter Vista Public Utility District. This District collects wastewater from the area and transports it to the City of

Porterville system for treatment and disposal. The current sewer system rate is \$\_\_\_\_\_ per month. The previous flat monthly rate for water service from the Fairways Tract Water Company was \$\_\_\_\_\_. This was \_\_\_\_\_% of the 2006-10 estimated median household income for the neighborhood *based on American Community Survey numbers at the block group level*. The current City Water rate is metered with a base monthly charge of \$\_\_\_\_\_ and a usage fee of \$\_\_\_\_\_ for each 100 cubic feet used. The average water rate per customer over the roughly one year period since the City System has been operating has been \$\_\_\_\_\_ with a range of \$\_\_\_\_\_ to \$\_\_\_\_\_ per month. This is approximately \_\_\_\_\_% of the 2006-10 estimated median household income for the neighborhood *based on American Community Survey numbers at the block group level*. See table below for before and after comparison:

**5. Billing methods for the community systems** *Does the community use the property tax rolls to collect annually or semi-annually. Other services that might be on the same bill. Are bill paid by mail or is there an office drop off point. Discuss how this works for very small communities that do not have a formal billing process.*

The Fairways Tract Water Company was formed in \_\_\_\_\_. The Water Company is now in the process of dissolving since the neighborhood has been annexed into the City of Porterville and water service is now provided by the City. Prior to the nonoperation of the Water Company, the Company operated its water system totally as an enterprise fund with all operating revenue generated from customer user fees. Customers were billed monthly by a contract bookkeeping firm, Creekside Bookkeeping located in Exeter. The bookkeeping company generated bills, received payments by mail, and made deposits to the Water Company's bank account.

**6. Are systems in the black or in debt?**No debt.

The following is financial information for the last full year of operations (FY\_\_\_\_\_ ) for the Fairways Tract Water Company:

<u>Description</u>	<u>Water System</u>
Cash beginning of year	\$ _____
Operating Income	\$ _____
Operating Expense	\$ _____
Depreciation	\$ _____
Operating Exp (w/o Dep)	\$ _____
Nonoperating Revenue	\$ _____
Nonoperating Expenses	\$ _____
Cash end of year	\$ _____
Change In Net Assets	\$ _____

**7. Are systems run as a business or are the systems dealt with more issue by issue as they come**

Issues are dealt with as they arise, for the most part. The system has continuously had to deal with nitrate MCL violations by notifying customers that the water was unsafe to drink and by applying for funding to resolve the issue.

The following is a chronology of the steps taken to eventually resolve the water quality issues:

<u>Milestone</u>	<u>Time Frame</u>
Attend funding fair	
Prepare USDA preapp	
Prepare CDHS Preapp	
Invitation to apply for DWSRF Funding	
Response by submitting SOI	
DWSRF Construction Application	
DWSRF Planning Application	
SHE loan to Design Project	
Negotiate contract with engineer to design project	
Negotiations with City of Porterville	
Prop 84 Construction App	
Prop 84 Letter of Commitment	
Approval of Labor Compliance Plan Procedures	
Prop 84 executed Construction Funding agreement	
Start Construction	
Complete Construction	
Transfer ownership of water system to City of Porterville	
Dissolve Water Company	
Party	

The previous water distribution system was old and prone to leaks. Volunteer board members made repairs when they could and even when it was very difficult (such as on hot days, when users without water were frustrated and would try to get volunteers to work harder and faster). Major breaks would be repaired by contractors, though much more expensively. **Reserve funds?**

**8. Range of household budgets in the community** *Discuss how much is spent on utilities such as sewer and water, if known. Are there discretionary funds in the typical households. If water or sewer rates go up what might get cut.*

The Fairways Tract Water Company represents an area that is severely disadvantaged, with 2006-10 ACS MHI indicating an MHI at less than \_\_\_\_% of the statewide MHI. The 2006-10 ACS indicates the following range of household incomes in the community:

Tulare County CT ____, BG ____, California	Annual Household Income Estimate	Margin of Error
Less than \$10,000	%	+/-
\$10,000 to \$14,999	%	+/-
\$15,000 to \$24,999	%	+/-
\$25,000 to \$34,999	%	+/-
\$35,000 to \$49,999	%	+/-
\$50,000 to \$74,999	%	+/-
Median income (dollars)	\$	+/- \$

An estimated \_\_\_\_% of households have annual incomes less than \$25,000 and \_\_\_\_% of households have annual incomes less than \$35,000. As such, there is very little disposable income in the community.

**9. Population served .**

The Fairways Tract Water Company previously served \_\_\_\_ dwellings with a population of approximately \_\_\_\_ persons.

**10. Short description of water systems and sewer systems including number of connections adequacy of backup systems and MCL challenges if known.**

Fairways Tract residents are provided sewer service by the Porter Vista Public Utility District. This District collects wastewater from the area and transports it to the City of Porterville system for treatment and disposal.

Insert relevant MSR info on Porter Vista PUD

The Fairways Tract Water Company had \_\_\_ connections servicing \_\_\_ residences.

The system has continuously had to deal with nitrate MCL violations by notifying customers that the water was unsafe to drink and by applying for funding to resolve the issue. The previous water distribution system was old and prone to leaks. Volunteer board members made repairs when they could and even when it was very difficult (such as on hot days, when users without water were frustrated and would try to get volunteers to work harder and faster). Major breaks would be repaired by contractors, though much more expensively.

With only one operating well, the Water Company had no back-up source of water when the pump was down. In addition, there were no sectionalizing valves on the old water distribution system, which meant when line repairs were made, the whole system had to be shut down.

**11. Existing governing body such as County Service District, Public Utility District, Mutual water system, etc.**

The Fairways Tract Water Company was governed by a \_\_\_ member Board of Directors. The Company is set up as a mutual benefit, not-for-profit entity(?). In effect, the President and Vice-President volunteered both as policy makers and as unpaid maintenance and repair staff.

**12. Decision making process** *Is there a board of directors, designated lead home owner, long time unofficial leader, or is there a lack of good decision making process. History on this would be good.*

The water system's president and vice-president make the day to day decisions as needed to keep the system in operation.

**13. Discussion of operation and maintenance personnel for each community**

*Part-time or full time personnel, contractors used, any shared human resources with other communities or agencies.*

While in operation, the water system was operated by volunteer board members. Oversight of operations was made by a contract certified water treatment plant and distribution operator, Tom Day.

**14. Discuss how district/company is managed such as independent manager, County personnel involved, CDPH personnel involved Is the California Public Utilities Commission involved on rate setting or is it a local decision?**

The water system was managed generally by the \_\_\_-member board of directors. Two of the directors, president & vice-president. In addition, the water system paid a certified water treatment plant and distribution system operator who handled sampling, nitrate notifications and consumer confidence reports (CCRs). Bookkeeping was handled by a contract bookkeeping company (Creekside in Exeter).

Since the Fairways Tract Water Company has less than 200 connections, the system is monitored by the Tulare County Health & Human Services Agency, Tulare County Public Health Environmental Health Division. Tulare County is the Local Primacy Agency under the State Department of Public Health in monitoring compliance for and in enforcing EPA's Safe Drinking Water Act.

As a Mutual, the system is not regulated by the PUC.

**15. Discuss problems that have been solved by community that could be applied as solutions by other communities.**

The Fairways Tract water system had had nitrate problems since about \_\_\_\_\_. The local Board, primarily through the efforts of the president and vice-president, through the cooperation of the water company membership made strides over the years that eventually resolved the water system's nitrate problem. After years of effort, the Company received grant funding from CDPH to design and build a new water distribution system with an intertie to the City of Porterville's water system.

**16. Discuss largest unresolved problems/issues for the community and what is being considered to solve these problems, if any.**

Annexation to the City of Porterville and the consolidation with the City's water system are significant milestones that the Fairways Tract neighborhood has already accomplished. As part of the City, the neighborhood has the opportunity to benefit further through the City's access to resources that unincorporated areas find more lacking. **Ask Jim and Leno if they see more unresolved problems.**

# HARDWICK

15-50 Connections Range  
(20 Connections) **get exact#**

## Location and Introduction

The community of Hardwick is located in the northeastern portion of Kings County, California approximately 5 miles west of the intersection of Excelsior Rd. and State Highway 43 between 14th and 15th Avenues. The Kings River runs 1.2 miles (1.9 km) north of the community.

### 1. When was community established and why.

The community of Hardwick was named to commemorate an official of the Southern Pacific Railroad. A post office was established in Hardwick in 1895, discontinued in 1904, reestablished in 1909, and finally permanently closed in 1942. The community has been served by the post office located in Hanford. The first school in the community was moved from the then-fading town of Kingston. Another schoolhouse was reportedly built in 1893. Subsequently, a new school was constructed in 1914 and operated until the Hardwick and Kings River schools unified in 1962. The present fire station is located on the site of the earlier school.

### 2. How old are the systems.

The Hardwick Water Company, a non-profit mutual benefit corporation, provides water to about half the residents of this small rural community with 41 homes and about 140 residents. The Water Company provides domestic water service to approximately 20 residential properties. The other dwellings and businesses in Hardwick currently obtain their water from private wells. The majority of the private wells tested (13/16) exceeded the uranium Maximum Contaminant Level of 30 ppb.

The existing system's water well was drilled in the 1960's on a small parcel owned by the Water Company. The original well reportedly has a 10-inch casing. In later years an 8-inch casing was installed in the 10-inch casing to repair a break in the old casing according to a report by the Kings County Department of Public Health. The existing well is estimated to be 160-170 feet deep. There are also 2 older wells on the property. The original electrical service panel was replaced, but the service line is currently installed on the original makeshift power pole which appears to be close to collapse.

The 1978 pump was replaced with a new 7.5 hp submersible pump in 2006 by Hayes and Sons. The well pump discharges into a 1,500 gallon hydro-pneumatic tank that has been welded for repairs on two separate occasions. The tank is fitted with a pressure gauge that maintains system pressures of 30-50 psi. System pressure is maintained at this level due to concerns that higher pressure settings may result in leaks (previous experience with the system operation).

The existing gate valve between the hydro-pneumatic tank and the system will not completely shut off water flow to the system. As a result, this requires the entire distribution system to be shut down and the tank drained for any repairs to the distribution system. The distribution system is comprised of primarily old (reportedly 100 year-old) 2-inch steel pipelines that run in a haphazard pattern along alleys as well as streets and the exact locations are unknown in some areas. There are numerous dead-ends in the system where previous services had been terminated. The current practice of providing service is to shut down the system, drain it completely and then cut out a portion of the pipe and install a tee with the compression couplings to provide a new service lateral. Many leaks have occurred on the service connections and the location of some service connections is unknown. There are currently no gate valves within the entire distribution system. The current system cannot meet Kings County Fire Department requirements for storage or pressure and there are currently no fire hydrants in the entire system.

### 3. Median household income.

Per the last decennial census to calculate median household income, the 2000 Census indicated the median annual income for households in Kings County Census Tract 1 Block Group 1 that incorporates the community of Hardwick, was \$31,786 or 66.9% of the statewide median household income at that time. This Census Tract Block Group took in an area of approximately 10 square miles which is much larger than the community which sits on approximately 20 acres. Since then the US Census Bureau no longer asks the income question in the decennial census, but rather collects income data through the continually occurring American Community Survey where a smaller sampling is done annually. This data is expressed as a 5-year adjusted average. The median annual household income for the past two rounds is expressed as:

<u>Period</u>	<u>MHI</u>	<u>Margin of Error</u>	<u>% of State MHI</u>
2005-09	\$53,750	+/- \$12,624	89.0%
2006-10*	\$ _____	+/- \$ _____	_____ %
2010 Survey	\$23,000		37.8%

It was suspected that the census data for the block group showed a higher income level than actually exists within Hardwick. Community residents indicated this median household income figure appeared higher than that of the community as most residents are either retired or farm workers whose incomes are either fixed or seasonal in nature. Therefore, to more accurately determine resident characteristics, a community survey was considered necessary. Therefore, for the purposes of submitting funding applications to CDPH and for CDBG funds through Kings County, a community survey was conducted by Self-Help Enterprises in June 2010. SHE determined that there were 41 housing units in Hardwick with 36 being occupied at the time of the survey. Surveyors visited every occupied unit, receiving 33 complete survey responses (91%).

Based on survey results, the median household income for the community is determined to be **\$23,000**, with 82 percent of the residents living in low-income households. This includes 33 percent and 27 percent of families that live in very low and extremely low income households respectively. Just over half of the community is Hispanic and roughly a quarter of the households have some members employed as farmworkers. According to the ACS, the 2009 MHI for Census Tract 1, Block Group 1 (an area that includes, but is much larger than, Beverly Grand's service area) was \$53,750 +/- \$12,624. At the time of the income survey, ACS data at the block group level reported income figures more than twice the actual income of Hardwick households. ACS income data should therefore be considered less than reliable for the Hardwick community.

**4. Monthly sewer rates and water rates, if known.**

Monthly water rates: \$40.00 per month.

**5. Billing methods for the community systems.**

Customers have the option of either mailing in their payments by check or money order or paying them in person at the Board of Directors President's home located at 14616 Johnson Street, Hardwick, CA 93230.

**6. Are systems in the black or in debt?**

The Hardwick Water Company currently operates financially in the black.

The amount of revenue collected to cover water system expenses is sufficient to cover operating costs. At least \$5,000 remains in checking and anything left-over is put in saving for emergencies. For example, in 2011 Hardwick Water Company put aside approximately \$4,000 annually for reserves.

**7. Are systems run as a business or are the systems dealt with more issue by issue as they come up?**

*The system is dealt with on an issue by issue basis. However, they do have a Board and a bookkeeper.*

The Hardwick Water Company operates as a business; however, has its challenges. Currently, the Water Company has had difficulty the Secretary position on the board. The District Board has the goal to operate the water system finances as enterprise funds. However, this has been a challenge for the Water Company due to the limited number of customers in the system.

**8. Range of household budgets in the community.** *Discuss how much is spent on utilities such as sewer and water, if known. Are there discretionary funds in the typical households. If water or sewer rates go up what might get cut.*

Hardwick is severely disadvantaged, with 2006-10 ACS MHI indicating an MHI of approximately \_\_\_\_% of the statewide MHI. The 2006-10 ACS indicates the following range of household incomes in the community:

Hardwick CDP, California	Annual Household Income Estimate	Margin of Error
Less than \$10,000	45.5%	+/-46.8
\$10,000 to \$14,999	0.0%	+/-70.1
\$15,000 to \$24,999	36.4%	+/-46.9
\$25,000 to \$34,999	0.0%	+/-70.1
\$35,000 to \$49,999	0.0%	+/-70.1
\$50,000 to \$74,999	0.0%	+/-70.1
\$75,000 to \$99,999	0.0%	+/-70.1
\$100,000 to \$149,999	0.0%	+/-70.1
\$150,000 to \$199,999	18.2%	+/-26.6
\$200,000 or more	0.0%	+/-70.1
Median income (dollars)	17,813	+/-17,712

An estimated 81.9% households have annual incomes less than \$25,000. The 2006-10 ACS indicates that 75.3% +/- 37.7% of Hardwick residents live below the poverty line. As such, there is very little disposable income in the community. However, due to almost a 100% margin of error for the median household income, the ACS income data should therefore be considered less than reliable for the Hardwick community. Survey results appear to be much more statistically relevant and reliable. Insert survey numbers in above table

A breakdown of similar household income levels for families in other Tulare Lake Basin communities shows that families have some discretionary funding, but it is limited due to their poverty income levels. Furthermore, any substantial increase in water rates could pose a hardship upon some of Hardwick's residents.

## 9. Population served.

The 2010 United States Census reported that Hardwick had a population of 138. The population density was 994.6 people per square mile. The racial makeup of Hardwick was 63 (45.7%) White, 5 (3.6%) African American, 0 (0.0%) Native American, 0 (0.0%) Asian, 0 (0.0%) Pacific Islander, 67 (48.6%) from other races, and 3 (2.2%) from two or more races. Hispanic or Latino of any race were 86 persons (62.3%).

The average household size was 4.03. There were 37 housing units at an average density of 266.7 per square mile, of which 18 (52.9%) were owner-occupied, and 16 (47.1%) were occupied by renters. The homeowner vacancy rate was 0%; the rental vacancy rate was 5.9%. 63 people (45.7% of the population) lived in owner-occupied housing units and 74 people (53.6%) lived in rental housing units.

**10. Short description of water systems and sewer systems including number of connections adequacy of backup systems and MCL challenges if known.**

Number of connections: 20 connections; the other 15 to 20 residents are on private wells.

The Kings County Fire Department operates a fire station in Hardwick.

The water system has continuously produced water exceeding the Uranium MCL of 20ppb or 30 pico curies. challenges: Uranium in drinking water system.

Backup system: None

**11. Existing governing body such as County Service District, Public Utility District, Mutual water system, etc.**

The Hardwick Water Company is considered a domestic non-profit organization. The Hardwick Water Company, a non-profit mutual benefit corporation, provides water to about half the residents of this small rural community with 41 homes and about 140 residents. The Water Company provides domestic water service to approximately 20 residential properties. The other dwellings and businesses in Hardwick currently obtain their water from private wells. The majority of the private wells tested (13/16) exceeded the uranium Maximum Contaminant Level of 30 ppb.

**12. Decision making process** – Is there a board of directors, designated lead homer owner, long time unofficial leader, or is there a lack of good decision making process. History on this would be good.

The Hardwick Water Company Board of Directors consists of a Board President, Treasurer, and Secretary.

**13. Discussion of operation and maintenance personnel for each community.**  
*Part-time or full time personnel, contractors used, any shared human resources with other communities or agencies.*

The Board president volunteers and takes care of routine system maintenance. In addition, the Water Company contracts for the following services:

One (1) part-time bookkeeper.

One (1) contract System Operator.

- 14. Discuss how district is managed such as independent manager, County personnel involved, CDPH personnel involved. Is the California Public Utilities Commission involved on rate setting or is it a local decision?**

The District is managed by a Board of Directors.

Water rates are set by the Board

- 15. Discuss problems that have been solved by communities that could be applied as solutions by other communities.**

None, the water system has always had a problem with uranium contaminants. However, in 2012 they received notification from CDPH that a Funding Agreement will be issued to them by January of 2013.

- 16. Discuss largest unresolved problems/issues for the communities and what is being considered to solve these problems, if any.**

Largest Unresolved Issue: Uranium in the drinking water system.

Solution: Hardwick has a Prop 84 grant pending and will be issued a Funding Agreement soon.

# KETTLEMAN CITY

201-500 Connections Range  
(366 Connections)

## Location and Intro

Kettleman City is located 28 miles southwest of Hanford. It is near the halfway point between Los Angeles. The community is located on the west side of the San Joaquin Valley at the base of the Kettleman Hills. Kettleman City is divided into two areas. The commercial zone of gas, food and lodging businesses is at Kettleman Junction where Interstate 5 and State Route 41 meet. The residential area together with some retail businesses and county government buildings is located about 1.2 mi north on State Route 41. The California Aqueduct crosses State Route 41 between these two areas.

### 1. When was community established and why.

The Kettleman Hills were named after Dave Kettelman, a pioneer sheep and cattleman who grazed his animals there in the 1860s. Oil was discovered in the Kettleman Hills in 1928. A. Manford Brown, a real estate developer, founded the town of Kettleman City in 1929 and a post office was opened. A branch library was established in 1930. By 1940, Kettleman City had a population of about 600. The early 1970's saw two substantial projects that had significant impacts on the community: the completion of the California Aqueduct and the opening of Interstate 5. Waste Management, Inc. opened a hazardous waste disposal site in the Kettleman Hills in the late 1970's. Many residents are employed by local farming operations or other related industries.

The Kettleman City CSD was formed ....

### 2. How old are the systems.

Much of the water and distribution system has been in place for over fifty years.

The sewer system was built in the late 1970's...

See Kings LAFCO MSR

### 3. Median household income.

Per the last decennial census to calculate median household income, the 2000 Census indicated the median annual income for households in the Kettleman City Census Designated Place (CDP), was \$22,409 or 47.2% of the statewide

median household income at that time. Since then the US Census Bureau no longer asks the income question in the decennial census, but rather collects income data through the continually occurring American Community Survey (ACS) where a smaller sampling is done annually. This data is expressed as a 5-year adjusted average. The median annual household income for the past two rounds is expressed as:

<u>Period</u>	<u>MHI</u>	<u>Margin of Error</u>	<u>% of State MHI</u>
2005-09	\$25,488	+/- \$5,305	42.2%
2006-10	\$25,988	+/- \$6,619	45.4%

An estimated 38.6% of families and 43.7% of the population were considered in the 2006-10 ACS to live below the poverty line.

**4. Monthly sewer rates and water rates, if known.**

The monthly residential water rate is a flat \$30.05 dollars per month and the residential sewer rate is \$24.00 dollars per month. This is approximately 1.4% and 1.1% respectively for water and sewer service of the 2006-10 estimated median household income for the community.

Charges for other users vary from \$ to \$.

**5. Billing methods for the community systems.**

Members of the Kettleman CSD system pay their monthly water bills in cash or by check or money order in person at the District Office; or by mail to the Districts P.O. Box.

**6. Are systems in the black or in debt?**

The Kettleman CSD system financially operates in the black.

In the fiscal year 2009-10, the District's financial situation was as follows:

<u>Description</u>	<u>Water System</u>
Cash beginning of year	\$ _____
Operating Income	\$ _____
Operating Expense	\$ _____
Depreciation	\$ _____
Operating Exp (w/o Dep)	\$ _____
Nonoperating Revenue	\$ _____
Nonoperating Expenses	\$ _____
Cash end of year	\$ _____

If 10/11 is available use that

**7. Are systems run as a business or are the systems dealt with more issue by issue as they come up?**

The Kettleman Community Services District operates as a business. However, often times the CSD deals with issues as they arise.

**8. Range of household budgets in the community. Unknown**

Kettleman City is severely disadvantaged, with 2006-10 ACS MHI indicating an MHI of 45.4% of the statewide MHI. The 2006-10 ACS indicates the following range of household incomes in the community:

Kettleman City CDP, California	Annual Household Income Estimate	Margin of Error
Less than \$10,000	2.6%	+/-4.4
\$10,000 to \$14,999	17.5%	+/-17.7
\$15,000 to \$24,999	23.7%	+/-19.3
\$25,000 to \$34,999	19.0%	+/-16.1
\$35,000 to \$49,999	5.5%	+/-7.1
\$50,000 to \$74,999	21.2%	+/-18.8
\$75,000 to \$99,999	0.0%	+/-13.6
\$100,000 to \$149,999	10.6%	+/-14.0
\$150,000 to \$199,999	0.0%	+/-13.6
\$200,000 or more	0.0%	+/-13.6
Median income (dollars)	25,988	+/-6,619

An estimated 43% of households have annual incomes less than \$25,000 and 62% of households have annual incomes less than \$35,000. The 2006-10 ACS indicates that 9.4% +/- 11.1% of Kettleman City residents live below the poverty line. As such, there is very little disposable income in the community.

**9. Population served.**

The 2010 United States Census reported that Kettleman City had a population of 1,439. The population density was 6,819.9 people per square mile. The racial makeup of Kettleman City was 478 (33.2%) White, 4 (0.3%) African American, 8 (0.6%) Native American, 1 (0.1%) Asian, 0 (0.0%) Pacific Islander, 887 (61.6%) from other races, and 61 (4.2%) from two or more races. Hispanic or Latino of any race were 1,383 persons (96.1%).

The average household size was 4.11. There were 367 housing units at an average density of 1,739.3 per square mile, of which 135 (38.6%) were owner-occupied, and 215 (61.4%) were occupied by renters. The homeowner vacancy rate was 0.7%; the rental vacancy rate was 1.4%. 564 people (39.2% of the population) lived in owner-occupied housing units and 875 people (60.8%) lived in rental housing units.

**10. Short description of water systems and sewer systems including number of connections adequacy of backup systems and MCL challenges if known.**  
Number of water connections: 352

The KCCSD currently supplies water to the community that is derived from two active wells. These wells currently provide 315 acre feet of water per year, with a pumping capacity of 400 gm per well. Currently, water is stored in three water tanks to meet water demand and fire hydrant flow requirements.

MCL Challenges: The water quality, however, is contaminated with Benzene and Arsenic(?) as well as secondary water quality issues which have prompted the water treatment facility to be a top priority for the District and community as a whole. Summer peak flow demands and limited storage tanks also place a strain upon the District's water system and leaves it vulnerable to possible shortages. Because of this limiting factor, little to no substantial growth has occurred in Kettleman City over the last several years.

**11. Existing governing body such as County Service District, Public Utility District, Mutual water system, etc.**

The Kettleman City Community Services District provides water and sewer service as well as park maintenance to the unincorporated community of Kettleman City. The District is governed by a 5-member board of directors.

See Kings LAFCO MSR

**12. Decision making process:**

The Kettleman City CSD Board of Directors is in charge of the decision making process related to the community's water system. This applies to policy decisions and other major decisions. The District Office Manager Rosa Maldonado, provides the overall management of the system.

**13. Discussion of operation and maintenance personnel for each community.**

1 Office Manager (expand on duties—does this person function as a general manager?)

1 Clerical Assistant

1 Contracted System Operator – Tito Balling, California Water Service Co.

2 Full-time Maintenance Persons

2 Part-time Maintenance Persons

**14. Discuss how district is managed such as independent manager, County personnel involved, CDPH personnel involved.**

District has 1 full-time Office Manager accountable to the Board of Directors; and 1 full-time Clerical Assistant.

Water rates are a local decision.

Since the KCCSD water system has more than 200 connections, and is monitored directly by the State Department of Public Health for compliance with EPA's Safe Drinking Water Act. The District Wastewater Treatment and Disposal Facility has a Waste Discharge Permit from the Central Valley Regional Water Quality Control Board and as such is monitored by that enforcement agency for compliance with permit requirements.

**15. Discuss problems that have been solved by community that could be applied as solutions by other communities.**

- The Kettleman City CSD is in the midst of a long process to gain

**16. Discuss largest unresolved problems/issues for the community and what is being considered to solve these problems, if any.**

**Community Challenges:**

**Water quality and quantity.** The KCCSD currently supplies water to the community that is derived from two active wells. These wells currently provide 315 acre feet of water per year, with a pumping capacity of 400 gm per well. Currently, water is stored in three water tanks to meet water demand and fire hydrant flow requirements. The water quality, however, is contaminated with Benzene and according to the 2011 CCR with respect to MCL an Arsenic level of 11.8 Range of Detections: 4.3 – 18.4); as well as secondary water quality issues which have prompted the water treatment facility to be a top

priority for the District and community as a whole. Summer peak flow demands and limited storage tanks also place a strain upon the District's water system and leaves it vulnerable to possible shortages. Because of this limiting factor, little to no substantial growth has occurred in Kettleman City over the last several years.

**Deteriorated water infrastructure system.** Much of the underground water and sewer lines connecting residences and commercial uses to the District's facilities have been in place for over fifty years. These connecting pipe lines have often been found to be deteriorated and even noted as non-existent with only a rust lined tunnel conveying water. Improvements will be needed to the overall District's infrastructure to ensure adequate pressure can be maintained throughout the system after the new water treatment facility becomes operational.

**Solutions:**

**Redevelopment Area.** An option no longer available to Kettleman City was Kings County's first and only established Redevelopment Area. The tax increment funding from tax appreciation within the area would have provided Kettleman City with a unique funding source.

**Water Treatment Facility.** The Kettleman City Community Services District is currently in the process of developing plans for the construction of a new water treatment facility that will serve to greatly improve the community's water quality and quantity. The County has devoted 3 million dollars towards the new facility and has secured a five acre site south of the residential area and near the aqueduct. The County has also made available to the community an additional 2.7 million dollars worth of State water allocations (300 acre feet of water) to the community on an annual basis that will be delivered through the aqueduct.

# LAMONT

2000+ Connections Range  
(3,500 Connections) **get exact #**

## Location and Introduction

The Kern County community of Lamont is located \_\_\_\_\_ and \_\_\_\_ miles southeast of the City of Bakersfield.

### 1. When was community established and why

Lamont was established

### 2. How old are the systems

The Lamont PUD was formed in \_\_\_\_\_, The water and sewer system were initially built in \_\_\_\_\_...

### 3. Median household income

Per the last decennial census to calculate median household income, the 2000 Census indicated the median annual income for households in the Lamont Census Designated Place (CDP), was \$25,578 or 53.9% of the statewide median household income at that time. Since then the US Census Bureau no longer asks the income question in the decennial census, but rather collects income data through the continually occurring American Community Survey where a smaller sampling is done annually. This data is expressed as a 5-year adjusted average. The median annual household income for the past two rounds is expressed as:

<u>Period</u>	<u>MHI</u>	<u>Margin of Error</u>	<u>% of State MHI</u>
2005-09	\$31,311	+/- \$2,639	51.8%
2006-10	\$33,799	+/- \$1,796	59.0%

### 4. Monthly sewer rates and water rates, if known.

The monthly flat(?) water rate is \$ \_\_\_\_\_ dollars per month and the monthly sewer rate is \$ \_\_\_\_\_ dollars per month. This is approximately \_\_\_\_ % and \_\_\_\_ % respectively for water and sewer service of the 2006-10 estimated median household income for the community.

**5. Billing methods for the community systems** *Does the community use the property tax rolls to collect annually or semi-annually. Other services that might be on the same bill. Are bill paid by mail or is there an office drop off point. Discuss how this works for very small communities that do not have a formal billing process.*

Lamont PUD mails out water and sewer utility bills to its customers on a monthly basis. Water and sewer service customers have the option of writing a check or obtaining a

money order and then mailing payment to the District's post office box. The other option, which approximately \_\_\_\_% of customers opt for, is to pay their monthly water and sewer bills by cash(?), check or money order during normal business hours (\_\_\_\_ to \_\_\_\_) Monday through Friday.

**6. Are systems in the black or in debt?**

The amount of revenue collected to cover water and sewer system expenses is sufficient to cover operating costs, debt service, debt reserve and put aside approximately \$\_\_\_\_\_ annually for reserves. In the fiscal year 2010-11, the District's financial situation was as follows:

<u>Description</u>	<u>Water System</u>
Cash beginning of year	\$
Operating Income	\$
Operating Expense	\$
Depreciation	\$
Operating Exp (w/o Dep)	\$
Nonoperating Revenue	\$
Nonoperating Expenses	\$
Cash end of year	\$
Change in Net Assets	\$
Interest Paid	\$

**7. Are systems run as a business or are the systems dealt with more issue by issue as they come**

The Lamont PUD District operates as a business, but has its challenges.

A recent (2\_\_) Municipal Services Review (MSR) by Kern County LAFCO makes the following conclusion:

...[

**8. Range of household budgets in the community** *Discuss how much is spent on utilities such as sewer and water, if known. Are there discretionary funds in the typical households. If water or sewer rates go up what might get cut.*

Lamont is severely disadvantaged, with 2006-10 ACS MHI indicating an MHI at less than 60% of the statewide MHI. The 2006-10 ACS indicates the following range of household incomes in the community:

Lamont CDP, California	Annual Household Income Estimate	Margin of Error
Less than \$10,000	11.1%	+/-3.8
\$10,000 to \$14,999	6.0%	+/-2.5
\$15,000 to \$24,999	14.2%	+/-3.9
\$25,000 to \$34,999	22.0%	+/-4.7
\$35,000 to \$49,999	16.5%	+/-3.6
\$50,000 to \$74,999	19.1%	+/-4.3
\$75,000 to \$99,999	2.8%	+/-1.7
\$100,000 to \$149,999	6.6%	+/-2.6
\$150,000 to \$199,999	1.8%	+/-1.3
\$200,000 or more	0.0%	+/-1.2
Median income (dollars)	33,799	+/-1,796

An estimated 53% of households have annual incomes less than \$35,000. In addition, 27.2% +/- 4.9% of Lamont's residents live below the poverty level. As such, there is very little disposable income in the community.

**9. Population served**

The 2010 United States Census reported that Lamont had a population of 15,120. The population density was 3,268.6 people per square mile. The racial makeup of Lamont was 6,677 (44.2%) White, 130 (0.9%) African American, 230 (1.5%) Native American, 72 (0.5%) Asian, 9 (0.1%) Pacific Islander, 7,351 (48.6%) from other races, and 651 (4.3%) from two or more races. Hispanic or Latino of any race were 14,293 persons (94.5%).

The average household size was 4.44. There were 3,598 housing units at an average density of 777.8 per square mile (300.3/km<sup>2</sup>), of which 1,536 (45.1%) were owner-occupied, and 1,869 (54.9%) were occupied by renters. The homeowner vacancy rate was 1.5%; the rental vacancy rate was 3.3%. 7,065 people (46.7% of the population) lived in owner-occupied housing units and 8,054 people (53.3%) lived in rental housing units.

**10. Short description of water systems and sewer systems including number of connections adequacy of backup systems and MCL challenges if known.**

The Lamont PUD has \_\_\_ water connections servicing \_\_\_\_\_ residences, the \_\_\_\_\_. The District also provides sewer service to all of these users with the exception of \_\_\_\_\_.(?)

East Orosi's water system is supplied from groundwater from...

The sewer system....

**11. Existing governing body such as County Service District, Public Utility District, Mutual water system, etc.**

The Lamont Public Utility District provides water service to the large unincorporated community of Lamont and the neighboring community of Weedpatch. The District is governed by a 5-member board of directors ...

**12. Decision making process** *Is there a board of directors, designated lead home owner, long time unofficial leader, or is there a lack of good decision making process. History on this would be good.*

The Lamont Public Utility District Board of Directors is in charge of the decision making process related to the community's water system. This applies to policy decisions and other major decisions. The District General Manager provides the overall management of the system.

As a side note, the District used to contract with a private company to manage and operate the District's activities. (If a careful narrative can be done that is honest but doesn't get used sued for libel (?).

**13. Discussion of operation and maintenance personnel for each community**

*Part-time or full time personnel, contractors used, any shared human resources with other communities or agencies.*

The District has ....

**14. Discuss how district is managed such as independent manager, County personnel involved, CDPH personnel involved** *Is the California Public Utilities Commission involved on rate setting or is it a local decision?*

The District has...

No CPUC. Most of their functions are entirely internal (budgeting, billing, operations, etc).

**15. Discuss problems that have been solved by community that could be applied as solutions by other communities.**

Lamont has...

Arsenic adsorption media treatment plant affordability on large scale with many users to share cost. Success with right media to minimize bed volumes ...

Sewer system expansion... issue with user of reclaimed water....

**16. Discuss largest unresolved problems/issues for the community and what is being considered to solve these problems, if any.**

Lamont....

DRAFT

# LEMON COVE

15-50 Connections Range  
( \_\_\_ Connections)

## Location and Introduction

The Tulare County community of Lemon Cove is located along State Highway 198 approximately \_\_\_ miles east of the City of Visalia and \_\_\_ miles southeast of the City of Woodlake.

### 1. When was community established and why

### 2. How old are the systems

### 3. Median household income

Per the last decennial census to calculate median household income, the 2000 Census indicated the median annual income for households in the community of Lemon as well as the surrounding area, was \$28,333 or 59.7% of the statewide median household income at that time. Since then the US Census Bureau no longer asks the income question in the decennial census, but rather collects income data through the continually occurring American Community Survey where a smaller sampling is done annually. This data is expressed as a 5-year adjusted average. The median annual household income for the past two rounds is expressed as:

<u>Period</u>	<u>MHI</u>	<u>Margin of Error</u>	<u>% of State MHI</u>
2005-09	\$40,125	+/- \$8,879	66.4%
2006-10	\$41,705	+/- \$21,145	72.8%

### 4. Monthly sewer rates and water rates, if known.

The Lemon Cove Sanitary District provides both water and sewer service to the townsite of Lemon Cove. The water and sewer bills are collected on the tax rolls. The charge averaged on a monthly basis is \$ \_\_\_ for water and \$ \_\_\_ for sewer. This is approximately \_\_\_% and \_\_\_% respectively for water and sewer of the 2006-10 estimated median household income for the community.

**5. Billing methods for the community systems** *Does the community use the property tax rolls to collect annually or semi-annually. Other services that might be on the same bill. Are bill paid by mail or is there an office drop off point. Discuss how this works for very small communities that do not have a formal billing process.*

The Lemon Cove Sanitary District collects charges for water and sewer service on the property tax rolls. As such charges are added to the tax bills sent out to property owners by the Tulare County Tax Collector. This revenue is deposited into the District's account at the Tulare County Treasurer's office in Visalia. The District (which utilizes the County of Tulare Treasury as its depository) pays its bills by utilizing the County's

Auditor-Controller's office to issue warrants (checks). Payment vouchers and an Order to Disburse Funds are approved monthly by the Board of Directors directing the County to issue warrants. When issued, the warrants are mailed to the LCSD thence the District general manager mails the warrants to vendors. This warrant process, depending on the dates vouchers are submitted takes anywhere from 2 to 4 weeks to issue a warrant. Though somewhat time consuming, this process consists of some additional oversight and documentation for each payment issued.

**6. Are systems in the black or in debt?**

The Lemon Cove CSD struggles constantly in staying financially afloat. In the past ten years, the District has had to borrow money once from Tulare County and twice from Self-Help Enterprises (SHE) and to cover operational costs. One financial crisis resulted due to payment of invoices from the District's fund at Tulare County when there were insufficient funds to cover warrants issued.

In the fiscal year 2010-11, the District's financial situation was as follows:

<u>Description</u>	<u>Water System</u>
Cash beginning of year	\$
Operating Income	\$
Operating Expense	\$
Depreciation	\$
Operating Exp (w/o Dep)	\$
Nonoperating Revenue	\$
Nonoperating Expenses	\$
Cash end of year	\$
Change in Net Assets	\$
Interest Paid	\$

**7. Are systems run as a business or are the systems dealt with more issue by issue as they come**

The LCSD District operates as a business, but has its challenges.

A recent (2011) Municipal Services Review (MSR) by Tulare County LAFCO makes the following conclusion:

**8. Range of household budgets in the community** *Discuss how much is spent on utilities such as sewer and water, if known. Are there discretionary funds in the typical households. If water or sewer rates go up what might get cut.*

Lemon Cove is a disadvantaged, with 2006-10 ACS MHI indicating a MHI at 66.4% of the statewide MHI. The median household income within the townsite served by the Lemon Cove Sanitary District is suspected to be significantly lower than that of the overall area covered in the Census Designated Place boundary. The 2006-10 ACS for the CDP indicates the following range of household incomes in the community:

Lemon Cove CDP, California	Annual Household Income Estimate	Margin of Error
Less than \$10,000		
\$10,000 to \$14,999		
\$15,000 to \$24,999		
\$25,000 to \$34,999		
\$35,000 to \$49,999		
\$50,000 to \$74,999		
Median income (dollars)		

An estimated \_\_\_% of households have annual incomes less than \$25,000 and \_\_\_% of households have annual incomes less than \$35,000. The 2006-10 ACS indicates that 37.2% +/- 22.9% of Lemon Cove residents live below the poverty line.

## 9. Population served

The 2010 United States Census reported that Lemon Cove had a population of 308. The population density was 369.5 people per square mile. The racial makeup of Lemon Cove was 261 (84.7%) White, 0 (0.0%) African American, 5 (1.6%) Native American, 3 (1.0%) Asian, 2 (0.6%) Pacific Islander, 12 (3.9%) from other races, and 25 (8.1%) from two or more races. Hispanic or Latino of any race were 76 persons (24.7%).

The average household size was 2.57. There were 153 housing units at an average density of 183.5 per square mile, of which 77 (64.2%) were owner-occupied, and 43 (35.8%) were occupied by renters. The homeowner vacancy rate was 0%; the rental vacancy rate was 6.0%. 202 people (65.6% of the population) lived in owner-occupied housing units and 106 people (34.4%) lived in rental housing units.

## 10. Short description of water systems and sewer systems including number of connections adequacy of backup systems and MCL challenges if known.

The Lemon Cove Sanitary District provides water and sewer service to the community. The water system is supplied with one well drilled near McKay's Point which produces water exceeding the MCL for nitrate. After pumping into a ground level storage tank, booster pump and hydropneumatic tank, the water is transported \_\_\_ miles past the Sequoia Union School, Veteran's Memorial Building and a residential area before it reaches the Lemon Cove Sanitary District which encompasses the town of Lemon Cove. The District has no back-up source of water.

The community sewer system was originally built in the early 1900s. The original collection system consisted of concrete pipe that, over the years, gradually disintegrated due to hydrogen sulfide gas generated from wastewater piped through the system. In the early 1980s the District successfully applied for funding from the Farmers Home Administration (USDA) and replace the collection system with PVC piping. The treatment plan consists of a facultative treatment pond followed by an evaporation percolation pond for disposal.

The LCSD has \_\_\_ active connections servicing \_\_\_ residences, \_\_\_ commercial establishments, the Lemon Cove Women's Club and Post Office.

**11. Existing governing body such as County Service District, Public Utility District, Mutual water system, etc.**

The Lemon Cove Community Services District provides water and sewer service to the unincorporated community of Lemon Cove. The District is governed by a \_\_\_-member board of directors.

**12. Decision making process** *Is there a board of directors, designated lead home owner, long time unofficial leader, or is there a lack of good decision making process. History on this would be good.*

The Lemon Cove CSD Board of Directors is in charge of the decision making process related to the community's water system. This applies to policy decisions and other major decisions. The District Secretary on a volunteer basis provides the overall management of the system.

**13. Discussion of operation and maintenance personnel for each community**

*Part-time or full time personnel, contractors used, any shared human resources with other communities or agencies.*

The District has

**14. Discuss how district is managed such as independent manager, County personnel involved, CDPH personnel involved Is the California Public Utilities Commission involved on rate setting or is it a local decision?**

The District

Since the LCSD water system has less than 200 connections, the system is monitored by the Tulare County Health & Human Services Agency, Tulare County Public Health Environmental Health Division. Tulare County is the Local Primacy Agency under the State Department of Public Health in monitoring compliance for and in enforcing EPA's Safe Drinking Water Act. The District has a Waste Discharge Permit from the Central Valley Regional Water Quality Control Board and it's wastewater system is regulated by that agency.

No CPUC. Most of their functions are entirely internal (budgeting, billing, operations, etc). The exception is their banking relationship with the Tulare County Treasurer.

**15. Discuss problems that have been solved by community that could be applied as solutions by other communities.**

Lemon Cove has .

**16. Discuss largest unresolved problems/issues for the community and what is being considered to solve these problems, if any.**

Lemon Cove has

# MATHENY TRACT

201-500 Connections Range  
(276 Connections)

## Location and Introduction

The Tulare County community of Matheny Tract is comprised of two groupings of dwellings located south of the City of Tulare just east of Pratt Road.

### 1. When was community established and why.

Check internet or go to County Recorder subdivision map date and reason for naming Matheny also ask Julie Scaife

Matheny Tract is an aging unincorporated Tulare County subdivision. It was originally mapped in in the 1950s (1940s?) and many homes date back to that time.

### 1. How old are the systems.

*Insert USDA narrative*

The community of Matheny Tract is provided water by the Pratt Mutual Water Company (PMWC). Matheny Tract is located adjacent and south of the City of Tulare in Tulare County (see attached map). The Median Household Income for the Matheny Tract is \$27,467 as determined by the 2000 US Census Bureau (see attached). Approximately 1,980 people live in this area. This is a disadvantaged community. Pratt Mutual Water Company has 309 active service accounts servicing approximately 321 units in Matheny Tract.

Pratt Mutual Water Company currently has three wells. One of these wells (#2) has been condemned by the State Department of Health Services due to nitrate contamination exceeding the maximum contaminant level (MCL) of 45 ppm. The remaining two wells (#1 and #3) are now out of compliance with the new arsenic standard of 10ppb. Arsenic levels for Well #3 have ranged from 12 to 21 ppb, averaging 15.5 ppb for tests in recent years. Arsenic levels for Well #1 have ranged from 9 to 12 ppb, averaging 10.95 ppb in recent years. To make matters worse the two operating wells can barely keep up with capacity needs during summer months. PMWC has had to lower the pumps on both remaining wells in order to draw from the dropping water table. There is a history of water outages and/or low pressure conditions have occurring during times that the remaining well's pump is out of service for repair. If one of these wells goes down, they do not have enough capacity to serve water to the community.

To solve these problems, it is proposed that facilities be put in place that will provide for the consolidation of the City of Tulare water system with the Pratt Mutual Water Company, or alternatively, a master connection thereto. The proposed project would include the replacement of the existing water distribution system, construction of water transmission main lines, and a master service connection (for the "master meter" alternative only).

Wells 1 and 2 were drilled in 1961 (at the establishment of the water system) and Well 3 was drilled in 1976. Most of the distribution system piping dates to the 1960s. Well 3 is the sole active well: Well 2 was condemned due to nitrates (2002) and Well 1 was put on standby status in 2009, also due to nitrate contamination. Both Well 1 and Well 3 have arsenic contamination in excess of the MCL.

## **2. Median household income.**

Insert USDA narrative for MHI and add in TLB spreadsheet for MHIs

2009 for part of Census Tract 31: \$34,826

## **3. Monthly sewer rates and water rates, if known.**

Community survey info available?

*Monthly sewer rates and water rates, if known.*

No sewer. Water rates are \$40/month unmetered. There is a seasonal adjustment of \$5 additional during the summer months.

## **5. Billing methods for the community systems.**

*Billing methods for the community systems. Does the community use the property tax rolls to collect annually or semi-annually. Other services that might be on the same bill. Are bills paid by mail or is there an office drop off point. Discuss how this works for very small communities that do not have a formal billing process.*

Pratt Mutual contracts with the bookkeeping firm M Green & Company located in the neighboring City of Tulare. M Green & Company does the bookkeeping, billing and receives payment at its office. Customers have the option to pay by mail, to pay in person at the Pratt Mutual WC office (only open one or two afternoons per week), or at the store [does company pay for store to collect? Does store need to carry fidelity bond? Does store owner see this as a way to bring in more business?] that is adjacent to the

water company's office. (This office is rented for \$550 per month.) Office staffing is done on a volunteer basis by the water company secretary/treasurer.

#### **6. Are systems in the black or in debt?**

Pratt MWC has built up a sizable reserve and has over \$190,000 in cash (about \$100,000 of this amount is shareholder equity). They are capable of handling moderate emergencies without financial assistance, and recently replaced a well pump that had gone out. Water revenue in 2012 was \$135,000; operating expenses were just over \$141,000. The water company has no paid employees. They carry no debt at this time.

#### **7. Are systems run as a business or are the systems dealt with more issue by issue as they come up?**

##### **Insert EO or Tev wording**

There have been problems over the years, with board members paying themselves hefty salaries (allegedly \$2000+ per month) and some theft. Currently, the water company is run by a truly volunteer board. Despite past problems, the water company is in good financial standing and can weather financial and technical ups and downs pretty well.

#### **8. Range of household budgets in the community.**

*Discuss how much is spent on utilities such as sewer and water, if known. Are there discretionary funds in the typical households. If water or sewer rates go up what might get cut.*

Exact data is not available (although community survey currently underway may shed some light on this question) **Community survey info available?**

Most households are very low-income and would be negatively impacted by any significant increase in utility rates. However, most people seem to be in favor of a sewer system which would have a monthly fee.

##### **Census income data in ranges**

#### **9. Population served.**

Approximately 1200 residents. Mixed Caucasian, Hispanic and African-American.

##### **Add in numbers and percentages from CRLA survey**

**10. Short description of water systems and sewer systems including number of connections adequacy of backup systems and MCL challenges if known.**

Pratt Mutual Water Company currently has three wells, but only one is in use. One of these wells (#2) was condemned by the State Department of Health Services due to nitrate contamination exceeding the maximum contaminant level (MCL) of 45 ppm. The remaining two wells (#1 and #3) are out of compliance for the arsenic standard in effect January 2006 when the MCL for arsenic was lowered from 50ppb to 10ppb. Arsenic levels for Well #3 have ranged from 12 to 21 ppb, averaging 15.5 ppb for tests run over the past nine years. Arsenic levels for Well #1 have ranged from 9 to 12 ppb, averaging 10.95 ppb over the past nine years. To make matters worse the two operating wells can barely keep up with capacity needs during summer months. PMWC has had to lower the pumps on both remaining wells in order to draw from the dropping water table. Water outages and/or low pressure conditions have occurred during times that the remaining well's pump is out of service for repair.

Wells 1 and 2 were drilled in 1961 (at the establishment of the water system) and Well 3 was drilled in 1976. Most of the distribution system piping dates to the 1960s. Well 3 is the sole active well: Well 2 was condemned due to nitrates (2002) and Well 1 was put on standby status in 2009, also due to nitrate contamination. Both Well 1 and Well 3 have arsenic contamination in excess of the MCL. The system has about 276 unmetered services.

**11. Existing governing body such as County Service District, Public Utility District, Mutual water system, etc.**

*Existing governing body such as County Service District, Public Utility District, Mutual water system, etc.*

The Pratt Mutual Water Company provides water to the community of Matheny Tract. The governing Board of the PMWC is comprised of five directors. The board designates its officers which are a president, vice-president and a secretary/treasurer (at this time, one person fills both roles).

**12. Decision making process** *Is there a board of directors, designated lead home owner, long time unofficial leader, or is there a lack of good decision making process. History on this would be good.*

Control of Pratt Mutual Water Company has been fought over for years. Recently (in the past 2-3 years) there were even two boards attempting to function contemporaneously and to dominate each other. This was based on an erroneous interpretation of the water company's bylaws, which provided for an "executive board." Some chose to interpret the "executive board" as a second board with authority over the regular board. (The bylaws actually provided for an executive board which could be appointed from among the members of the board of directors, which could make

expedient decisions in day-to-day operations or other designated tasks.) For a while (about 6 months) the two boards tried to operate simultaneously, competing for control. Finally an attorney was hired and the matter was settled (the self-crowned "executive board" relented and relinquished their claims).

The mutual is so large (for its type) that there is a consistent problem with getting enough stakeholder participation to carry out director elections. It's my sense that this lack of community interest just concentrates power at the board level. The board has little choice but to simply keep appointing itself to power.

### **13. Discussion of operation and maintenance personnel for each community.**

*Part-time or full time personnel, contractors used, any shared human resources with other communities or agencies.*

There are no direct employees of Pratt MWC. The water company uses contracted services for operation (California Water Services/Tito Balling) and for bookkeeping (M Green & Company). They also use a pipe company, Andrews Backhoe, for repairs and have a relationship with an attorney in Tulare.

### **14. Discuss how district is managed such as independent manager, County personnel involved, CDPH personnel involved.**

*Is the California Public Utilities Commission involved on rate setting or is it a local decision?*

There is no manager. Board president makes a lot of decisions. The board meets monthly. The secretary-treasurer staffs the office a few hours a week.

### **15. Discuss problems that have been solved by community that could be applied as solutions by other communities.**

One major advantage that Pratt MWC has is its relatively large rate-payer base. They can afford to pay contracted operator & bookkeeper, taking the most challenging aspects of management out of the hands of the board.

Matheny Tract has had success in working with the City of Tulare for consolidation. A water system consolidation (no annexation, but the City will own & operate the water system) is planned for an early 2013 construction start. (Planning activities were funded by CDPH under Prop 84 and SRF.) They are also looking at a sewer collection system that would also connect to the City of Tulare. The City's wastewater treatment plant is located near the community, and there is a brand-new industrial waste trunkline in Pratt St, adjacent to the community.

**16. Discuss largest unresolved problems/issues for the community and what is being considered to solve these problems, if any.**

Planning money is on its way for a sewer system project. This will be funded in part by the Strategic Growth Council and in part by the Clean Water State Revolving Fund. All grant.

The community needs streetlights, storm drain, sidewalks, etc. A community committee has been working on these issues, among others. A community needs survey is being done by the Community Equity Initiative at CRLA.

User Type	# Connections	EDU's
Residential	308	320
Commercial	<u>1</u>	<u>1</u>
<b>Totals:</b>	<b>309</b>	<b>321</b>

DRAFT

# PIXLEY

501-2000 Connections Range  
(800 Connections) **get exact #**

## Location and Introduction

The Tulare County community of Pixley is located \_\_\_ miles south of the City of Tulare and \_\_\_ miles north of the City of Delano along US Highway 99.

### 1. When was community established and why.

The town was named after Frank M. Pixley who was the State Attorney General in 1860-1861. It was through his influence that the Southern Pacific Railroad built a depot and a three story hotel in Pixley.

### 2. How old are the systems.

According to the PPUD Chief Operator, in the 1940's the community's water system was operated by the Pixley Mutual Water Company. In 195\_\_ (?) the Pixley Public Utility District was formed which took over the operations of the water system and built the community's sewer system. . When the freeway was built some of the water distribution system was upgraded. The Sewer Treatment Plant was totally rebuilt in 2007. The older primary treatment process with ponds and a clarigester was replaced with an activated sludge treatment process designed to remove nitrogen from the effluent.

### 3. Median household income.

Per the last decennial census to calculate median household income, the 2000 Census indicated the median annual income for households in the Pixley Census Designated Place (CDP) that incorporates the community of Pixley, was \$23,304 or 59.1% of the statewide median household income at that time. Since then the US Census Bureau no longer asks the income question in the decennial census, but rather collects income data through the continually occurring American Community Survey where a smaller sampling is done annually. This data is expressed as a 5-year adjusted average. The median annual household income for the past two rounds is expressed as:

<u>Period</u>	<u>MHI</u>	<u>Margin of Error</u>	<u>% of State MHI</u>
2005-09	\$30,521	+/- \$7,769	50.5%
2006-10	\$35,759	+/- \$7,268	62.4%

### 4. Monthly sewer rates and water rates, if known.

Monthly Water Rate: "Base rate" is \$29.00 dollars per month; and

Monthly Sewer Rate: \$36.55 dollars per month.

This is approximately 1.0 % and 1.2 % respectively for water and sewer service of the 2006-10 estimated median household income for the community.

**5. Billing methods for the community systems.**

The Pixley PUD mails out water and sewer utility bills to its customers on a monthly basis. Members of the Pixley Public Utility District system can pay their monthly water bills in person at the District Office or by check or money order by mail at the District's P.O. Box#.

**6. Are systems in the black or in debt?**

Both the water and sewer systems financially operate in the black.

The amount of revenue collected to cover both the water and sewer system expenses is sufficient to cover operating costs, debt service, and debt reserve. Specifically, according to 2010 financial records PPUD has approximately \$5,481,479 in total assets (how much is cash?); and has restricted \$1,010,335 for future capital improvement projects.

**7. Are systems run as a business or are the systems dealt with more issue by issue as they come up?**

The Pixley Public Utility District operates strictly as a business; and they include their district legal counsel at all regular Board Meetings to ensure that the Board is in compliance to all federal and state regulations.

**8. Range of household budgets in the community.**

Pixley is a disadvantaged community, with 2006-10 ACS MHI indicating an MHI of approximately 62 % of the statewide MHI. The 2006-10 ACS indicates the following range of household incomes in the community:

Pixley CDP, California	Annual Household Income Estimate	Margin of Error
Less than \$10,000	6.7%	+/-5.8
\$10,000 to \$14,999	9.5%	+/-6.3
\$15,000 to \$24,999	18.1%	+/-9.0
\$25,000 to \$34,999	14.6%	+/-6.9
\$35,000 to \$49,999	19.7%	+/-7.3
\$50,000 to \$74,999	15.4%	+/-7.4
\$75,000 to \$99,999	9.7%	+/-6.5
\$100,000 to \$149,999	3.9%	+/-3.6
\$150,000 to \$199,999	1.1%	+/-1.7
\$200,000 or more	1.4%	+/-1.9
Median income (dollars)	35,759	+/-7,268

An estimated 48.9% households have annual incomes less than \$35,000. The 2006-10 ACS indicates that 30.9% +/- 9.6% of Pixley residents live below the poverty line. As such, there is very little disposable income in the community.

**9. Population served.**

The 2010 United States Census reported that Pixley had a population of 3,310. The population density was 1,062.8 people per square mile. The racial makeup of Pixley was 1,473 (44.5%) White, 90 (2.7%) African American, 28 (0.8%) Native American, 16 (0.5%) Asian, 0 (0.0%) Pacific Islander, 1,587 (47.9%) from other races, and 116 (3.5%) from two or more races. Hispanic or Latino of any race were 2,675 persons (80.8%).

The average household size was 4.15. There were 875 housing units at an average density of 280.9 per square mile, of which 433 (54.3%) were owner-occupied, and 365 (45.7%) were occupied by renters. The homeowner vacancy rate was 1.6%; the rental vacancy rate was 9.2%. 1,691 people (51.1% of the population) lived in owner-occupied housing units and 1,619 people (48.9%) lived in rental housing units.

**10. Short description of water systems and sewer systems including number of connections adequacy of backup systems and MCL challenges if known.**

Number of water/sewer connections: 800

**MCL challenges:** high arsenic content.

**Existing Facilities:**

The water supply facilities include 4 wells (Numbers 1, 2A, 3A, and 4). The 4 wells have a pumping capacity of 2,782 gpm. The existing chemical makeup of the water from Wells No's 1, 2A, 3A, and 4 have Arsenic levels of 25, 20, 18 and 3 ppb, respectively, with three of the wells above the new Federal limit of 10 ppb. These existing 3 wells require treatment for Arsenic removal. Well No's 1, 2A, 3A, and 4 were constructed in 1962, 1999, 1999, and 1978, respectively. The domestic water system presently serves approximately 2,829 people or 815 connections, of which only 380 are metered.

**District Water Use:**

The Community of Pixley currently has four operational domestic wells. Well 1 has an estimated flow rate of 824 gpm. Well No. 2A is the largest producing well with a flow rate of 852 gpm. The four wells have a total pumping capacity of 2,782 gpm. This condition is adequate for the current population; however, is insufficient under fire flow condition. Based on meter readings at the wells during the summer of 2007, the maximum month demand was 33,497,000 gallons in June. The average day demand during the maximum month was 1,080,548 gallons per day. The peak day demand was 2,088,000 gallons on May 29, 2007.

**11. Existing governing body such as County Service District, Public Utility District, Mutual water system, etc.**

Public Utility District

**12. Decision making process:**

Board of Directors

**13. Discussion of operation and maintenance personnel for each community.**

1 full-time Office Manager

1 full-time Administrative Assistant

1 full-time Chief Water/Sewer System Operator

1 full-time Water/Sewer System Maintenance Person

**14. Discuss how district is managed such as independent manager, County personnel involved, CDPH personnel involved.**

The District Office is managed by 1 full-time Office Manager

Water rates are a local decision.

**15. Discuss problems that have been solved by community that could be applied as solutions by other communities.**

The District has lifted its building moratorium after the RWQCB ended its cease and desist order. This was a result of the District obtaining funding from both the USDA Rural Utility Service and the SWRCB Small Community wastewater Grant Program to build a new wastewater treatment plant at the site of the old deteriorated facility. The District built an activated sludge treatment plant designed and operated to remove nitrogen from the wastewater. This system could be looked at as a method for small systems to comply with RWQCB requirements for nitrogen removal to protect the groundwater.

Three of the District's water wells produce water that exceeds the arsenic MCL of 10ppb. The District has applied for and received a Prop 84 planning grant from CDPH to cover the majority of these costs. The District also received a "grant" from CDI as a result of a settlement with that company and the RWQCB. This grant was utilized to drill a water test well and may be helpful in covering some of the other planning costs.

**16. Discuss largest unresolved problems/issues for the community and what is being considered to solve these problems, if any.**

**MCL:** High arsenic content in the water system.

**How to Resolve:** Pixley PUD was recently awarded funding to address the high arsenic contamination in their wells. The project is currently under-way.

# PLAINVIEW MUTUAL WATER COMPANY

201-500 Connections Range  
(240 Connections) **check exact #**

## Location and Introduction

The Tulare County community of Plainview is located along both sides of Road 196 approximately 10 miles south of the City of Exeter in Tulare County, and Southwest of the City of Lindsay.

## Information to be included for each community:

### 1. When was community established and why.

Plainview was laid out as two Tracts (125 and 150) in the late 1940's on two 20 acre piece of ground at what is now the northwest corner of the intersection of Avenue 196 and Road 196. The Tracts consisted of \_\_\_ lots, most of which were residential with a few commercial establishments located on Road 196. At one time there was a lumber yard and a post office in the community. Many dust bowl refugees located here, purchasing a parcel or two and built their homes, some were originally tents.

### 2. How old are the systems.

The original developers of the subdivision organized the Plainview Mutual Water Company (PMWC) to provide water to Plainview residents. In the late 1940's (?) two wells were drilled and a water distribution system installed. During these times, it was difficult to obtain adequate materials, and a large part of the system was built using recycled oil field piping. The MWC is located East of Road 196 provides water to approximately 194 residential properties and a grocery store. The Central Water System provides water to the western portion of the community (west of Road 196) with approximately 46 houses.

### 3. Median household income.

Per the last decennial census to calculate median household income, the 2000 Census indicated the median annual income for households in Tulare County Census Tract 33 Block Group 2 that incorporates 11 square miles and the community of Plainview, was \$28,056 or 59.1% of the statewide median household income at that time. Since then the US Census Bureau no longer asks

the income question in the decennial census, but rather collects income data through the continually occurring American Community Survey where a smaller sampling is done annually. This data is expressed as a 5-year adjusted average. The median annual household income for the past two rounds is expressed as:

<u>Period</u>	<u>Area</u>	<u>MHI</u>	<u>Margin of Error</u>	<u>% of State MHI</u>
2005-09	CTBG	\$34,766	+/- \$7,818	57.6%
2006-10	CDP	\$21,012	+/- \$4,789	36.7%
2010	Survey	\$15,500		25.5%

Prior to the community's designation as a CDP, it was suspected that the census data for the block group showed a higher income level than actually exists within the service area of the Plainview MWC. Therefore, a community survey was conducted by Self-Help Enterprises between December 2010 and April 2011. The median household income was determined by the survey to be **\$15,500 (25.5% of 2010 CA MHI [\$60,883])**.

**4. Monthly sewer rates and water rates, if known.**

There is no sewer service in Plainview. The community is dependent on individual septic tank systems for sewage disposal. The current water rate is \$35.00 per month. This is approximately 2.0% of the 2006-10 estimated median household income for the community.

**5. Billing methods for the community systems.**

Plainview mutual Water Company has contracted with the City of Lindsay to collect and bill residents of Plainview.

**6. Are systems in the black or in debt?**

Plainview Mutual Water Company is currently in the black.

**7. Are systems run as a business or are the systems dealt with more issue by issue as they come up?**

System is run like a business.

Description	Water System
Cash beginning of year	\$
Operating Income	\$
Operating Expense	\$
Depreciation	\$
Operating Exp. (w/o Dep.)	\$
Non-operating Revenue	\$
Non-operating Expenses	\$
Cash end of year	\$
Change in Net Assets	\$
Interest Paid	\$

**8. Range of household budgets in the community.** Discuss how much is spent on utilities such as sewer and water, if known. Are there discretionary funds in the typical households. If water or sewer rates go up what might get cut.

Plainview is a disadvantaged community, with 2006-10 ACS MHI indicating an MHI of approximately 36.7% of the statewide MHI. The 2006-10 ACS indicates the following range of household incomes in the community:

Plainview CDP, California	Annual Household Income Estimate	Margin of Error
Less than \$10,000	22.7%	+/-12.7
\$10,000 to \$14,999	14.7%	+/-10.3
\$15,000 to \$24,999	22.2%	+/-12.3
\$25,000 to \$34,999	13.8%	+/-9.7
\$35,000 to \$49,999	8.9%	+/-6.3
\$50,000 to \$74,999	10.7%	+/-7.4
\$75,000 to \$99,999	2.2%	+/-3.0
\$100,000 to \$149,999	4.9%	+/-7.7
\$150,000 to \$199,999	0.0%	+/-16.2
\$200,000 or more	0.0%	+/-16.2
Median income (dollars)	21,012	+/-4,789

An estimated 59.6% households have annual incomes less than \$25,000 and 73.4% households have annual incomes less than \$35,000. The 2006-10 ACS indicates that 53.7% +/- 16.3% of Plainview residents live below the poverty line. As such, there is very little disposable income in the community.

## **9. Population served.**

The 2010 United States Census reported that Plainview had a population of 945. The population density was 3,057.1 people per square mile. The racial makeup of Plainview was 358 (37.9%) White, 8 (0.8%) African American, 20 (2.1%) Native American, 2 (0.2%) Asian, 0 (0.0%) Pacific Islander, 517 (54.7%) from other races, and 40 (4.2%) from two or more races. Hispanic or Latino of any race were 865 persons (91.5%).

The average household size was 4.52. There were 224 housing units at an average density of 724.7 per square mile, of which 107 (51.2%) were owner-occupied, and 102 (48.8%) were occupied by renters. The homeowner vacancy rate was 2.7%; the rental vacancy rate was 3.7%. 485 people (51.3% of the population) lived in owner-occupied housing units and 460 people (48.7%) lived in rental housing units

## **10. Short description of water systems and sewer systems including number of connections adequacy of backup systems and MCL challenges if known.**

The Plainview Mutual Water Company (PMWC) water system was almost completely renovated in 2010. The PMWC water system consists of two wells (1 new and the other about 50 years old) equipped with new electrical panels, two new chlorinators, and two 8,000 gallon hydropneumatic tanks. In addition, a new back-up diesel generator was installed at the primary well site. Undersized wharf hydrants were replaced with standard AWWA approved fire hydrants. Furthermore, water lines which were once located in the alleyways behind the houses (which were in close proximity to failing septic tanks and often directly below gray water discharge) were abandoned. New water mains were installed in front of homes located in the county road right-of-way. These improvements reduced the possibility of sewage effluent seeping into the distribution system when the water system is shut down and/or when water pressure drops.

In 2012, Plainview Mutual Water Company (PMWC) purchased the Central Water System from a private owner. Thus, adding an additional 44 new customers to the PMWC economy of scale.

There is no community wide sewer system that serves the community of Plainview. The community depends on individual on-site septic tank systems for wastewater disposal. Average lot size in the community is approximately 7,000 square feet, which is well below the minimum requirement of 12,500 square feet of area required by the County of Tulare for septic systems in communities with a community water system. These small lot sizes are too small to support efficient septic tank effluent leaching. There is also insufficient space available on most lots for replacement of on-site systems that have been in existence for over 50 years.

In addition to the relatively small lot sizes, another restriction for septic system effluent leaching is the preponderance of tight soil conditions in the community. Natural Resources Conservation Service soils maps (see attached Custom Soil Resource Report) indicate two soil types in the community, the Flamen loam and the Quonal-Lewis association. Both of these soils types have duripans.

Residents were also asked questions concerning the adequacy of current on-site wastewater/septic systems in the community survey conducted between December 2010 and April 2011. The following is a tabulation of some of the responses:

- Seventy-four percent (74%) of Plainview residents (n= 142) indicate a desire for a public sewer system;
- Twenty-six percent (26%) of Plainview residents (n=48) indicated having had their septic tank pumped within the last three years;
- Twenty percent (20%) of Plainview residents (n=36) indicate they have had problems with their septic systems since having their leach fields or seepage pits repaired or replaced;
- Nineteen percent (19%) of Plainview residents (n= 36) indicated that their sewage disposal system has given them problems;

**11. Existing governing body such as County Service District, Public Utility District, Mutual water system, etc.**

The Plainview Mutual Water Company is a Mutual Water Company that has a Board of Directors.

**12. Decision making process** – Is there a board of directors, designated lead homer owner, long time unofficial leader, or is there a lack of good decision making process. History on this would be good.

Board of Directors

**13. Discussion of operation and maintenance personnel for each community.**

Part-time or full time personnel, contractors used, any shared human resources with other communities or agencies.

One (1) contract System Operator.

One (1) contract Certified Public Accountant.

One (1) contract billing system (City of Lindsay)

- 14. Discuss how district is managed such as independent manager, County personnel involved, CDPH personnel involved. Is the California Public Utilities Commission involved on rate setting or is it a local decision?**

Managed by Board of Directors.

Rate setting is a local decision by the Board.

- 15. Discuss problems that have been solved by communities that could be applied as solutions by other communities.**

Quite a few. The MWC received a generous funding package from the CDBG Program via the County of Tulare (test wells and hookup assistance); USDA \$1,000,000 grant and DWSRF grant and loan package. The USDA and CDPH funds were used to drill a new water production well and equip the well site with a new pump, pressure tank and backup power as well as the total replacement of the deteriorated water distribution system.

The MWC recently purchased a neighboring private water system.

- 16. Discuss largest unresolved problems/issues for the communities and what is being considered to solve these problems, if any.**

The MWC's purchase of the private water system to the west of Road 196 has made the local Board of the deficiencies of that separate portion of the water system. Recent water quality analysis has indicated that the well serving this area has been tested above the MCL for nitrate. In addition, the water distribution system in this western portion is in need of repair or replacement. Lastly, a connection between the two systems may be warranted to provide a more reliable supply of potable water to the western portion.

In order to resolve the community's wastewater issues, the community and the Plainview Mutual water Company have petitioned the County of Tulare to seek a solution. In June 2012, the County of Tulare submitted a planning application to the SWRCB to investigate options to solve these problems on a community wide basis. The SWRCB has approved the application's Plan of Study and funding from the application is currently pending



DRAFT



# RICHGROVE

501-2000 Connections Range  
(600 Connections) **get exact #**

## Location and Introduction

The Tulare County community of Richgrove is located \_\_\_ miles south of the City of Porterville and \_\_\_ miles east of the City of Delano along the old State Highway 65 now known as Richgrove Drive.

### 1. When was community established and why.

The

### 2. How old are the systems.

The

### 3. Median household income.

Per the last decennial census to calculate median household income, the 2000 Census indicated the median annual income for households in Richgrove, was \$22,885 or 48.2% of the statewide median household income at that time. Since then the US Census Bureau no longer asks the income question in the decennial census, but rather collects income data through the continually occurring American Community Survey where a smaller sampling is done annually. This data is expressed as a 5-year adjusted average. The median annual household income for the past two rounds is expressed as:

<u>Period</u>	<u>MHI</u>	<u>Margin of Error</u>	<u>% of State MHI</u>
2005-09	\$27,386	+/- \$4,681	45.3%
2006-10	\$28,261	+/- \$5,020	49.3%

### 4. Monthly sewer rates and water rates, if known.

The monthly flat water rate is \$\_\_\_\_\_ dollars per month and the monthly sewer rate is \$\_\_\_\_\_ dollars per month. This is approximately \_\_\_ % and \_\_\_ % respectively for water and sewer service of the 2006-10 estimated median household income for the community.

**5. Billing methods for the community systems.**

The Richgrove CSD mails out water and sewer utility bills to its customers on a monthly basis. Water and sewer service customers have the option of writing a check or obtaining a money order and then mailing payment to the District's post office box. The other option, which approximately \_\_\_% of customers opt for, is to pay their monthly water and sewer bills as cash, check or money order when the office is open between the hours of \_\_:00 am and \_\_:00 pm.

**6. Are systems in the black or in debt?**

The amount of revenue collected to cover sewer system expenses is sufficient to cover operating costs, debt service, debt reserve and put aside approximately \$ \_\_\_\_\_ annually for reserves. On the other hand, revenue generated to operate the water is not sufficient to cover costs. In the fiscal year 2008-09, the District's financial situation was as follows:

<u>Description</u>	<u>All Funds</u>	<u>Water System</u>	<u>Sewer System</u>
Cash beginning of year	\$ _____		
Operating Income		\$ _____	\$ _____
Operating Expense		\$ _____	\$ _____
Depreciation		\$ _____	\$ _____
Operating Exp (w/o Dep)		\$ _____	\$ _____
Nonoperating Revenue		\$ _____	\$ _____
Cash end of year	\$ _____		

**7. Are systems run as a business or are the systems dealt with more issue by issue as they come up?**

The District operates as a business, but has its challenges.

## 8. Range of household budgets in the community.

Richgrove is severely disadvantaged, with 2006-10 ACS MHI indicating an MHI at 49.3% of the statewide MHI. The 2006-10 ACS indicates the following range of household incomes in the community:

Richgrove CDP, California	Annual Household Income Estimate	Margin of Error
Less than \$10,000	11.5%	+/-5.4
\$10,000 to \$14,999	6.4%	+/-3.6
\$15,000 to \$24,999	25.5%	+/-6.3
\$25,000 to \$34,999	14.7%	+/-5.6
\$35,000 to \$49,999	21.1%	+/-6.9
\$50,000 to \$74,999	9.3%	+/-4.7
\$75,000 to \$99,999	7.8%	+/-4.0
\$100,000 to \$149,999	3.8%	+/-2.9
\$150,000 to \$199,999	0.0%	+/-7.0
\$200,000 or more	0.0%	+/-7.0
Median income (dollars)	28,261	+/-5,020

Based on ACS data, an estimated 58% of households have annual incomes less than \$35,000 and an estimated 35.1% +/- 8.3% of residents live below the poverty line. As such, there is very little disposable income in the community.

A breakdown of similar household income levels for families in other Tulare Lake Basin communities shows the following budgets. There is some discretionary funding, but it is limited. If water and sewer rates increase, it is likely that the following expense categories could be impacted:

**Need Budget info from our housing folks**

## 9. Population served.

The 2010 United States Census reported that Richgrove had a population of 2,882. The population density was 6,376.2 people per square mile. The racial makeup of Richgrove was 1,068 (37.1%) White, 20 (0.7%) African American, 38 (1.3%) Native American, 140 (4.9%) Asian, 7 (0.2%) Pacific Islander, 1,521 (52.8%) from other races, and 88 (3.1%) from two or more races. Hispanic or Latino of any race were 2,705 persons (93.9%).

The average household size was 4.82. There were 610 housing units at an average density of 1,349.6 per square mile, of which 271 (45.3%) were owner-occupied, and 327 (54.7%) were occupied by renters. The homeowner vacancy rate was 0%; the rental vacancy rate was 0.3%. 1,247 people (43.3% of the population) lived in owner-occupied housing units and 1,635 people (56.7%) lived in rental housing units.

**10. Short description of water systems and sewer systems including number of connections adequacy of backup systems and MCL challenges if known.**

The Richgrove CSD has \_\_\_ water connections servicing \_\_\_\_\_ residences, the District also provides sewer service to all of these users with the exception of the cold storage houses located west of the old railroad tracks.

Richgrove's water system is supplied from groundwater from \_\_\_\_\_ wells.

Richgrove's sewer system system....

Insert info from LAFCO MSR

**11. Existing governing body such as County Service District, Public Utility District, Mutual water system, etc.**

The Richgrove Community Services District provides water and wastewater service to the unincorporated community of Richgrove. The District has a five member board.

**12. Decision making process:**

The Richgrove CSD Board of Directors is in charge of the decision making process related to the community's water and wastewater systems. This applies to policy decisions and other major decisions. The District Office Manager provides the overall management of the system(?).

**13. Discussion of operation and maintenance personnel for each community.**

- 1 Full-time Office Manager expand
- 1 Full-time Maintenance Person expand
- 1 Contracted System Operator expand-delineate tasks in his contract

**14. Discuss how district is managed such as independent manager, County personnel involved, CDPH personnel involved.**

The District has one office manager that is accountable to the Board of Directors. It appears that the office manager fills the role of a general manager. The District lacks the resources to hire a full time manager and there is not a need for full time management.

Since the water system has more than 200 connections, the system is reports directly to the Department of Public Health which monitors the District for compliance for and in enforcing EPA's Safe Drinking Water Act.

**15. Discuss problems that have been solved by community that could be applied as solutions by other communities.**

Over the years, various board members and staff have struggled yet persevered to seek resources to solve their water and sewer issues. The water system is greatly improved compared to the system the District took over in the late 1970's. That said, there is still need to make improvements which the District Board is pursuing through applications to CDPH and ...

On the wastewater side...

**16. Discuss largest unresolved problems/issues for the community and what is being considered to solve these problems, if any.**

-The largest unresolved water problem for Richgrove is ....

-The District needs to do a rate analysis for the water system which is underfunded(?).

-The District needs to plan for the eventual increase of wastewater capacity .....

# SULTANA

51-200 Connections Range  
(156 Connections) get exact #

## Location and Introduction

The Tulare County community of Sultana is located along Avenue 416 and roughly half way between the City of Dinuba and the town of Orosi.

### 1. When was community established and why.

The railroad was built in the 1870s through the area now known as Sultana. The townsite was not laid out until 1912 decades after the nearby town sites of Dinuba and Orosi were settled. Sultana was a shipping point for local farm growers and packing sheds. The community of Sultana has a post-office, 1 elementary school that serves both Sultana and Monson.

### 2. How old are the systems.

Due to the drought of 1976-77 many private domestic wells in Sultana were going dry. In response the community organized a Community Services District that was formed in 1978. The District applied to the then Farmers Home administration (USDA) and received a 50-50 grant/loan to construct a community water system. A single well drilled supplied water to the community for many years. In the 1980's?) the District received CDBG funding and drilled a second well. This additional supply was important to both provide additional capacity and to provide for a backup source if one well went down. Unfortunately, the first well became contaminated with nitrate so another additional source was needed. The District successfully applied for Safe Drinking Water Program funding from the state and received a grant to drill Well #3 which currently is the only source of potable water for the community, as well #2 has since produced water exceeding the MCL for DBCP.

In response to septic system problems, the District applied for and received funding through both the USDA and the SWRCB's old Clean water Grant program to build a community sewer system and transport the wastewater to the Cutler-Orosi Wastewater Facility.

### 3. Median household income.

Per the last decennial census to calculate median household income, the 2000 Census indicated the median annual income for households in Tulare County Census Tract 3.01 Block Group 1 that incorporates the community of Sultana, was

\$30,987 or 65.2% of the statewide median household income at that time. Since then the US Census Bureau no longer asks the income question in the decennial census, but rather collects income data through the continually occurring American Community Survey where a smaller sampling is done annually. This data is expressed as a 5-year adjusted average. For Sultana, this comparative data is for Census Tract 3.01 Block Group 1 for the 2005-09 ACS and the Sultana Census Designated Place (CDP) for the 2006-10 ACS. The median annual household income for the past two rounds is expressed as:

<u>Period</u>	<u>Area</u>	<u>MHI</u>	<u>Margin of Error</u>	<u>% of State MHI</u>
2005-09	CT3.01BG1	\$42,321	+/- \$18,575	70.1%
2006-10	CDP	\$44,250	+/- \$23,185	77.2%

**4. Monthly sewer rates and water rates, if known.**

The monthly flat water rate is \$26.08 per month and the monthly sewer rate is \$\_\_\_\_\_ dollars per month. This is approximately \_\_\_ % and \_\_\_ % respectively for water and sewer service of the 2006-10 estimated median household income for the community.

**5. Billing methods for the community systems.**

Bills are paid monthly by mail to the Districts P.O. Box. In addition, customers may make their payments to the local feed store which is bonded to collect payments(?).

**6. Are systems in the black or in debt?**

The amount of revenue collected to cover sewer system expenses is sufficient to cover operating costs, debt service, debt reserve and put aside approximately \$\_\_\_\_\_ annually for reserves. In the fiscal year 2009-10, the District's financial situation was as follows:

<u>Description</u>	<u>All Funds</u>	<u>Water System</u>	<u>Sewer System</u>
Cash beginning of year	\$ _____		
Operating Income		\$64,507	\$91,488
Operating Expense	\$158,423		
Depreciation	\$ 24,017		
Operating Exp (w/o Dep)	\$134,406		
Nonoperating Revenue	\$ 9,446		
Nonoperating Expense	\$ 6,311		
Cash end of year	\$ _____		

The Sultana CSD currently operates financially in the black.

**7. Are systems run as a business or are the systems dealt with more issue by issue as they come up?**

The system is run by a Board of Directors and operates as a business. However, issues are also dealt with as they come up.

**8. Range of household budgets in the community.** Discuss how much is spent on utilities such as sewer and water, if known. Are there discretionary funds in the typical households. If water or sewer rates go up what might get cut

Sultana is a disadvantaged, with 2006-10 ACS MHI indicating an MHI at about 77.2% of the statewide MHI. The 2006-10 ACS indicates the following range of household incomes in the community:

Sultana CDP, California	Annual Household Income Estimate	Margin of Error
Less than \$10,000	4.0%	+/-6.0
\$10,000 to \$14,999	3.0%	+/-4.5
\$15,000 to \$24,999	27.3%	+/-19.8
\$25,000 to \$34,999	10.1%	+/-10.9
\$35,000 to \$49,999	10.1%	+/-8.6
\$50,000 to \$74,999	31.3%	+/-24.3
\$75,000 to \$99,999	4.0%	+/-7.1
\$100,000 to \$149,999	10.1%	+/-14.0
\$150,000 to \$199,999	0.0%	+/-32.0
\$200,000 or more	0.0%	+/-32.0
Median income (dollars)	\$44,250	+/- \$23,185

The 2006-10 ACS indicates that 27.6% +/- 17.1% of Sultana residents live below the poverty line. Unfortunately, there is a very wide margin of error (52.4%) with the ACS calculated MHI. Therefore, it is hard to make accurate assumptions of the true economic make up of the community of Sultana.

**9. Population served.**

The 2010 United States Census reported that Sultana had a population of 775. The population density was 1,746.4 people per square mile. The racial makeup of Sultana was 315 (40.6%) White, 0 (0.0%) African American, 3 (0.4%) Native American, 6 (0.8%) Asian, 0 (0.0%) Pacific Islander, 424 (54.7%) from other

racess, and 27 (3.5%) from two or more races. Hispanic or Latino of any race were 695 persons (89.7%).

The average household size was 3.52. There were 242 housing units at an average density of 545.3 per square mile (210.6/km<sup>2</sup>), of which 75 (34.1%) were owner-occupied, and 145 (65.9%) were occupied by renters. The homeowner vacancy rate was 4.9%; the rental vacancy rate was 3.2%. 254 people (32.8% of the population) lived in owner-occupied housing units and 521 people (67.2%) lived in rental housing units.

**10. Short description of water systems and sewer systems including number of connections adequacy of backup systems and MCL challenges if known.**

The Sultana CSD has \_\_\_ water connections servicing \_\_\_\_\_ residences, \_\_\_\_\_ commercial establishments, and the Monson-Sultana School(?) (drinking water only)(?). The District also provides sewer service to all of these users.(?)

Number of connections: 156 connections;

MCL challenges: DBCP in drinking water system.

Backup system: Contaminated as well.

**11. Existing governing body such as County Service District, Public Utility District, Mutual water system, etc.**

The Sultana Community Services District provides water and wastewater service to the unincorporated community of Sultana. The District has a five member board.

**12. Decision making process – Is there a board of directors, designated lead homer owner, long time unofficial leader, or is there a lack of good decision making process.**

The Sultana CSD Board of Directors is in charge of the decision making process related to the community's water and wastewater systems. This applies to policy decisions and other major decisions. The District Office Manager in

conjunction with the Board President provide the overall management of the system.

History on this would be good.

**13. Discussion of operation and maintenance personnel for each community.**

Part-time or full time personnel, contractors used, any shared human resources with other communities or agencies.

The water system contracts for services. details

One (1) part-time bookkeeper.

One (1) full-time System Operator.

**14. Discuss how district is managed such as independent manager, County personnel involved, CDPH personnel involved. Is the California Public Utilities Commission involved on rate setting or is it a local decision?**

The District is managed by a Board of Directors.

Water rates are set by the Board

**15. Discuss problems that have been solved by communities that could be applied as solutions by other communities.**

None

**16. Discuss largest unresolved problems/issues for the communities and what is being considered to solve these problems, if any.**

DBCP in the drinking water system primary well.

Using back-up well which is high in DBCP as well.

Solution: Secure funding from the state or USDA.

Potential 123 TCP?

# TEVISTON

51-200 Connections Range  
(1\_\_ Connections) **get exact #**

## Location and Introduction

The Tulare County community of Teviston is located between the communities of Pixley and Earlimart along US Highway 99.

### 1. When was community established and why.

Teviston was laid out in the late 1870s by the Southern Pacific Railroad between the towns of Pixley and Alila (now Earlimart). In this earlier era, the area was selected as a good location to grow eucalyptus trees for use by the railroad. There are still signs of remnant eucalyptus groves in the community. However, the lumber was found to be unsuitable for railroad ties and the soil too alkaline for commercial farming so development of the townsite did not occur. In 1938, an 80-acre parcel in Teviston by JJ Freeman, an African-American minister from Oklahoma, who encouraged other African-American families from Oklahoma, Texas and the Midwest to take advantage of available farm work. Reverend Freeman first provided a farm labor camp and later began selling parcels of land to the dust bowl immigrants. Through the last years of the depression and until the years following World War II, Teviston was one of the few places in Tulare County where African-Americans could own land, so the community grew. One hundred years after the initial American wave of settlement in California, these men and women remained true pioneers, continuing until 1959 to live in conditions generally associated with early settlers. While Americans were enjoying the rapidly accelerating affluence of the 50's, Teviston residents were hauling water in milk cans from the neighboring community of Pixley three miles away. Kerosene lamps were used for lighting at night and most houses depended on pit privies for sanitation.

Today Teviston is divided by Highway 99 and the Railroad. On the eastern side of Highway 99 and the Railroad, Teviston is bounded on the south by Deer Creek in an area some call Alkali Flats south of Avenue 72. The northern boundary is Avenue 84. The eastern boundary is Road 136. On the western side of Highway 99 Teviston is bounded by Avenue 72 on the south and Road 80 on the north and stretching west to Road 124.

## 2. How old are the systems.

In the 1950s efforts in the community were assisted by the American Friends Service Committee to help develop a community water system. One of the first steps was the formation of a Community Services District in November 1956. The District covers a portion of the overall community of Teviston and is located east of Highway 99 with the intersection of Avenue 80 and Road 132 located roughly in the center. The newly formed district borrowed funds to drill a community well, however, it wasn't until four years after that a water distribution system was built to supply at least part of the community with drinking water. The District's initial water distribution system was primarily constructed in the early 1960's. The pipeline system consisted of a mix of asbestos-cement, galvanized and plastic pipe varying in size from 1-1/2 to 6 inches. The distribution system was suffering from numerous breaks and leaks. The galvanized pipeline portions of the system had been corroded by the "hot" alkali soil. These frequent leaks, often in close proximity to septic tank systems, created a potential health hazard to Teviston's water consumers. The District also had few sectionalizing shut off valves which necessitated shutting down the whole system to make repairs.

Efforts in the early 1970s were unsuccessful in annexing a portion of Teviston located west of the Highway, however, this then proposed area became part of the District's Sphere of Influence (see LAFCO MSR Map Figure 8.1). For years the system operated with one source of water, the well located on Avenue 80. With no backup source; hence when a breakdown in the pump occurred, the community would be out of water, sometimes days at a time. In the 1970's the District convinced Tulare County to apply for HUD Community Development Block Grant (CDBG) funds to drill a second well for the community. A \$31,700 CDBG grant was approved and the District, putting over \$8,000 of its reserves in to the project and securing a \$9,500 National Demonstration Water Project grant was able to drill its second "North" well (located just west of Road 32 and north of Avenue 80) which provided much needed backup to the system.

During the late 1990's the District successfully applied to USDA Rural Development and received a 75% grant and 25% loan to upgrade the efficiency of the systems two well pumps, replace almost all of the water distribution system with 6-inch PVC piping, install sectionalizing gate valves, install new house services and install customer water meters. The water system currently supplies water to about 136 homes, four churches and the Teviston Community/Child Care Centers.

The system is down to one operating well again. The original (South) Well's casing has apparently collapsed after 50 years of use and is no longer

operational. The North Well is the only source of water for the community now so the system has no back-up and is vulnerable to water outages. One such outage occurred in \_\_\_\_\_ 2012 when the water level in the North Well dipped below the pumping level. This caused damage to the pump and required a lengthening of the pump shaft below the lower water level. The community was out of running water for \_\_\_\_\_ days.

Teviston is an unsewered community and residents depend on septic systems for wastewater disposal.

### **3. Median household income.**

The Teviston community is split into two Census Tract Block Groups that encompass a much larger area than the actual community. The Teviston Community Services District is located in a portion of Tulare County Census Tract 42 Block Group 4. The 1990 annual median household income for this Block Group was \$18,810. To more accurately determine the median household income and other demographics for the community, a special survey was conducted by Self-Help Enterprises and the Teviston Betterment Association in the spring of 1995. The results of this survey indicated that the actual annual median household income figure for the District was only **\$9,000** at the time. Another Census was conducted in the year 2000. The median household income for Census Tract 42 Block Group 4 was determined to be \$24,432 and \$24,500 (51.6% of statewide median household income) for CT42, BG1 at that time. More recent data from the 2006-09 Census Bureau's American Community Survey, indicates a median household income of \$24,627 +/- \$3,701 (40.0% of statewide median household income) for CT42, BG1. Though these numbers are very low, they again cover the larger area encompassed by the census tract block group that is not totally representative of the community of Teviston.

Is Teviston in CT42, BG 1 or BG 4?

Per the 2010 Census, the population was 1,214 when there were 352 housing units in the community and the median household income was \$23,050.

### **4. Monthly sewer rates and water rates, if known.**

The monthly water rate charged by the Community Services District is a basic of \$55.00 dollars per month for the first \_\_\_\_\_ gallons and \$ \_\_\_\_\_ for every 1,000 gallons thereafter.

There is no sewer service.

**5. Billing methods for the community systems.**

The District staff read water meters, calculate each customer's water usage and send out monthly bills to its customers by mail as close to the first of the month as possible. Payments can be mailed to the District's Post Office Box in Pixley or can be paid in person at the District's office located at the Teviston Community Center. Office hours for receipt of payment are \_\_\_\_\_ to \_\_\_\_\_ Monday through Friday(?). The District Office accepts cash, checks and money orders for payment.

**6. Are systems in the black or in debt?**

The amount of revenue collected to cover water system expenses is sufficient to cover operating costs, debt service, debt reserve and put aside approximately \$ \_\_\_\_\_ annually for reserves. In the fiscal year 2009-10, the District's financial situation was as follows:

<u>Description</u>	<u>Water System</u>
Cash beginning of year	
Operating Income	\$88,068
Operating Expense	\$91,902
Depreciation	\$16,390
Operating Exp (w/o Dep)	\$75,512
NonOperating Revenue	\$245
NonOperating Expense	\$6,914
Cash Income (Loss)	\$7,227
Cash end of year	_____

**7. Are systems run as a business or are the systems dealt with more issue by issue as they come up?**

The Teviston CSD District operates as a business, but has its challenges. After the older South Well's casing collapsed a few years ago, the District has been without a back-up source of water. The District has been able to locate an affordable funding source to either repair the South Well (if possible) or drill a new well. The District Board and management operate the water system

finances as an enterprise fund, collecting water related revenue to cover water related expenses. Water rates have increased significantly over the years.

**8. Range of household budgets in the community.**

Data from the Year 2000 Census indicates the following ranges in income for East Orosi families. More recent census data shows the median household income level since the 2000 Census have remained almost the same, so it is reasonable to use these earlier numbers:

Teviston is severely disadvantaged, with 2006-10 ACS MHI indicating an MHI at less than 40% of the statewide MHI. The 2006-10 ACS indicates the following range of household incomes in the community:

Teviston CDP, California	Annual Household Income Estimate	Margin of Error
Less than \$10,000	0.0%	+/-13.6
\$10,000 to \$14,999	17.3%	+/-17.1
\$15,000 to \$24,999	47.1%	+/-19.2
\$25,000 to \$34,999	0.0%	+/-13.6
\$35,000 to \$49,999	18.8%	+/-15.6
\$50,000 to \$74,999	7.0%	+/-6.2
\$75,000 to \$99,999	8.1%	+/-8.4
\$100,000 to \$149,999	0.0%	+/-13.6
\$150,000 to \$199,999	1.8%	+/-3.1
\$200,000 or more	0.0%	+/-13.6
Median income (dollars)	23,050	+/-8,392

An estimated 64% of households have annual incomes less than \$25,000. However, roughly 17% of households have annual incomes over \$50,000. The 2006-10 ACS indicates that 42.0% +/- 23.2% of Teviston residents live below the poverty line.

A breakdown of similar household income levels for families in other Tulare Lake Basin communities shows the following budgets. There is some discretionary funding, but it is limited. If water and sewer rates increase, it is likely that the following expense categories could be impacted:

**Need Budget info from our housing folks**

## 9. Population served.

The 2010 United States Census reported the greater Teviston area had a population of 1,214. The population density was 559.2 people per square mile. The racial makeup of Teviston was 449 (37.0%) White, 50 (4.1%) African American, 9 (0.7%) Native American, 10 (0.8%) Asian, 0 (0.0%) Pacific Islander, 640 (52.7%) from other races, and 56 (4.6%) from two or more races. Hispanic or Latino of any race were 1,039 persons (85.6%).

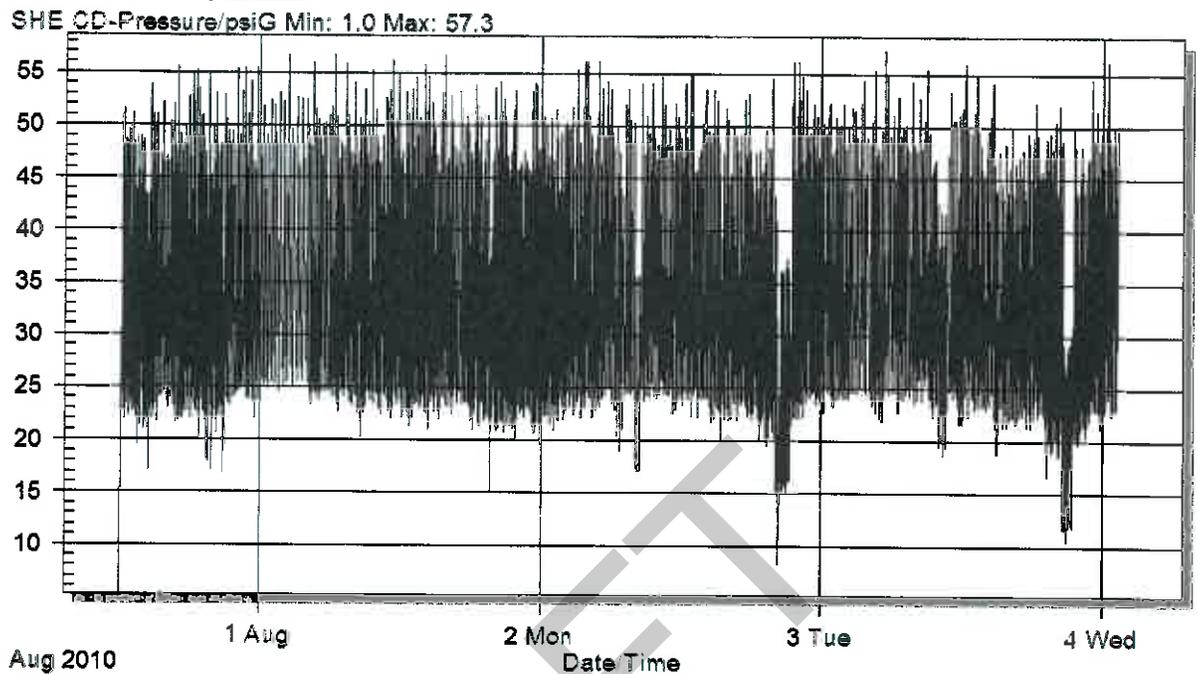
The average household size was 4.12. There were 352 housing units at an average density of 162.1 per square mile, of which 129 (43.7%) were owner-occupied, and 166 (56.3%) were occupied by renters. The homeowner vacancy rate was 7.2%; the rental vacancy rate was 5.1%. 500 people (41.2% of the population) lived in owner-occupied housing units and 714 people (58.8%) lived in rental housing units.

## 10. Short description of water systems and sewer systems including number of connections adequacy of backup systems and MCL challenges if known.

The Teviston Community Services District's water system consists of two wells, each equipped with a turbine oil lubricated pump and 5,000 gallon hydropneumatic tank. The system is down to one operating well again. The original (South) Well's casing has apparently collapsed after 50 years of use and is no longer operational. The North Well is the only source of water for the community now so the system has no back-up and is vulnerable to water outages. The water distribution system was almost completely replaced in 1998 with 6-inch PVC piping, new sectionalizing gate valves, new house services and customer water meters. The water system currently supplies water to about 100? homes, four churches and the Teviston Community/Child Care Centers.

The lack of a backup water supply with only well pump operating can stress the system and it is not uncommon for water system pressure to fall below the water works standard of 20 psi during the summer months:

## Teviston Pressure: Aug 1-4, 2010



The quality of water has met primary drinking water quality standards(?) and though the community is near other communities with nitrate and/or arsenic MCL concerns, has consistently produced water below these MCLs(?).

There are approximately \_\_\_ dwellings in the greater Teviston area that are provided water by private domestic wells. All of the community relies on septic tank systems and is unsewered.

### 11. Existing governing body such as County Service District, Public Utility District, Mutual water system, etc.

The Teviston Community Services District provides water service to that area within its boundaries of the unincorporated community of Teviston. The District has a five member board.

### 12. Decision making process:

The Teviston CSD Board of Directors is in charge of the decision making process. This applies to policy decisions and other major decisions. The District Office Manager provides the overall management of the system with assistance of the Board President.

**13. Discussion of operation and maintenance personnel for each community.**

- 1 Part-time Office Manager expand
- 1 Contracted Part-time System Operator expand

**14. Discuss how district is managed such as independent manager, County personnel involved, CDPH personnel involved.**

The District has one part-time office manager that is accountable to the Board of Directors. It appears that the office manager fills the role of a general manager, with the assistance of the Board President. The District lacks the resources to hire a full time manager and there is not a need for full time management.

Since the TCSD water system has less than 200 connections, the system is monitored by the Tulare County Health & Human Services Agency, Environmental Health Division. Tulare County is the Local Primacy Agency under the State Department of Public Health in monitoring compliance for and in enforcing EPA's Safe Drinking Water Act.

**15. Discuss problems that have been solved by community that could be applied as solutions by other communities.**

The District received a 75% grant and 25% loan from USDA for its water project built in the late 1990s. On May 17, 1996, USDA Rural Development obligated a \$372,000 grant and \$130,000 loan to the project.

**16. Discuss largest unresolved problems/issues for the community and what is being considered to solve these problems, if any.**

The water system's original well (South Well) that is now over 50 years old has collapsed. The system is down to one operating well again. The North Well is the only source of water for the community now so the system has no back-up and is vulnerable to water outages. One such outage occurred in \_\_\_\_\_ 2012 when the water level in the North Well dipped below the pumping level. This caused damage to the pump and required a lengthening of the pump shaft below the lower water level. The community was out of running water for \_\_\_\_ days.

While the monthly user fees are among the highest, the new connection fees charged by the Teviston CSD are among the lowest compared to other service providers throughout the County. It is recommended that the District complete a water master plan to address the capital facilities needs associated with additional development within the District and its SOI. Master planning is an excellent tool to substantiate fees to be charged to the development community for necessary capital infrastructure system improvements.

#### Local Accountability and Governance

1. The District complies with the Brown Act open meeting law by holding regularly scheduled meetings in which the public is invited. Regularly scheduled meetings are held on the second Thursday of each month at 6:00 p.m. at the District office. Agendas for Board meetings are posted on-site at the District office.
2. The District adopts budgets and rate changes at hearings where the public is notified and invited.

Teviston, an unincorporated community in Tulare County, is located in the southwest portion of the County, southwest of Porterville. Teviston is an agriculturally oriented service community surrounded on the north, west and south by lands in agricultural production and on the east by scattered rural residential, agricultural, and vacant land. The Teviston CSD, formed in November 1956, has a primary function of planning, constructing, and maintaining the domestic water system for the community. Domestic water service is the only service provided by the Teviston CSD that is subject to a MSR.

Teviston is located along State Route (SR) 99 between the communities of Earlimart and Pixley. The Tulare County/Kern County Line is located approximately 10 miles south of Teviston. The current District Boundary and the currently adopted SOI for the Teviston CSD are illustrated on Figure 8-1.

The Teviston CSD is responsible for providing domestic water service within the District's Boundary. Teviston's water system includes a distribution system consisting of 2, 4, and 6-inch pipelines, 2 wells, and two 5,000-gallon pneumatic pressure tanks. The wells are capable of delivering a combined source flow of approximately 900 gallons per minute (GPM). The two wells provide an ample clean water supply requiring no chlorination or treatment. The locations of the two wells (identified as north and south wells) are identified below.

- North Well – West side of Road 132 between Avenue 80 and Avenue 84
- South Well – North side of Avenue 80 between Drive 130 (Frontage Road) and Road 132

The north well is the primary well, and the south well comes online as necessary to meet peak summer demands or to fight the rare fire in Teviston. The south well was drilled in 1959, and the north well was added in 1978. The District's water supply has not been supplemented since 1978. The District indicated that the community water system currently supports 105 connections including 99 residential connections, 1 school connection, 4 church connections, and 1 connection to the community center.

In the early to mid 1990s, the District's water system was suffering multiple leaks and breakages costing the District valuable resources to repair. In some cases, leaks and breakages remained un-repaired causing potential health hazards to the residents in the community. The Preliminary Engineering Report Water Rehabilitation Project (Roberts Engineering, November 1995) was prepared for the Teviston CSD to address the problems with the District's water system, and recommend improvements including the identification of funding sources. In 1998, the District completed the following improvements as outlined in the Preliminary Engineering Report Water Rehabilitation Project:

- Construction of new 6-inch PVC water lines, including new lines to loop system, and replacement of old deteriorating pipelines.
- Installation of fire hydrants throughout system.
- Installation of water meters for all connections to the system.
- Installation of meters at each well site.
- Rehabilitation of the north well pump including new bowls, suction pipe and strainer, and new line and line shaft bearings to improve the overall pump efficiency.

The Teviston CSD has billed under a metered water system since 1998, which encourages water conservation. Prior to improvements to the District's water system (in 1994), as indicated in the Preliminary Engineering Report, the average per capita water usage for the District was calculated to be 297 gallons per capita day (GPCD), approximately 98% more than that of the normal average of 150 GPCD for similar small communities. The Preliminary Engineering Report concluded that the excess usage was most likely due to a combination of leakage and customer over usage. It is likely that the improvements to the District's water system (pipeline repairs and metering) significantly reduced the average per capita usage.

Present water usage data has been requested from the District; however, this data was not provided for this review. Due to the absence of this data, the degree to which the water system improvements have reduced the average per capita consumption cannot be quantified. Furthermore, it is difficult to draw

conclusions regarding the additional capacity that the improved water system can handle without present

water usage data. The Preliminary Engineering Report estimates that the two wells have adequate water supply to support a population of approximately 460 residents, or approximately 125 EDUs at a dwelling unit occupancy rate of 3.7 persons per household. |

DRAFT

# TOOLEVILLE

51-200 Connections Range  
(76 Connections)

## Location and introduction:

Tooleville is a small rural community located on the east side of Spruce Road roughly a mile and a half east of the city of Exeter in Tulare County. Homes in Tooleville are located along Alfred Avenue on the north and Morgan Avenue on the south, with a few homes fronting Spruce Road.

### 1. When was community established and why

Tooleville (named for the Toole family) was a farmworker settlement established by Dust Bowl migrants in the 1940s. It remains largely a farmworker town, but the population has shifted to be about 75% Hispanic.

### 2. How old are the systems

The water system was originally installed in the 1960s. Both wells date to that time. The Tooleville Mutual Nonprofit Water Association owns and operates the community's water system which serves 77 residential lots and one small business (currently vacant). The distribution system was replaced in 2009. The Morgan well's pressure tank was replaced in 2011.

### 3. Median household income

Per the last decennial census to calculate median household income, the 2000 Census indicated the median annual income for households in Tulare County Census Tract 14 Block Group 4 that incorporates the community of Tooleville, was \$29,330 or 61.8% of the statewide median household income at that time. Since then the US Census Bureau no longer asks the income question in the decennial census, but rather collects income data through the continually occurring American Community Survey where a smaller sampling is done annually. This data is expressed as a 5-year adjusted average. In 2010 Tooleville became a Census Designated Place (CDP). The median annual household income for the past two rounds is expressed as:

<u>Period</u>	<u>Area</u>	<u>MHI</u>	<u>Margin of Error</u>	<u>% MOE</u>
2005-09	CT14BG4	\$52,083	+/- \$74,732	143.5% margin of error
2006-10	CDP	\$43,977	+/- \$101,562	230.9% margin of error

It is obvious that the ACS did not receive input from enough Tooleville households to be representative. A 2005 community survey conducted by Tulare County and Self-Help Enterprises indicated the median household income at that time was \$15,500 which was roughly 26% of the statewide income at that time. It is recommended that the 2005 survey data be adjusted to the year 2010 for comparison

purposes. With a CPI increase of 10.4% from 2005 to 2010, this would equate to \$17,118 in 2010 or 30% of the \$57,287 statewide MHI at that time.

#### **4. Monthly sewer rates and water rates, if known.**

The Tulare County Service Area #1 Tooleville Zone of benefit provides sewer service to the community. The monthly sewer rate is \$59.25. The Tooleville Mutual Nonprofit Water Association, Inc. provides water service with a current flat rate of \$40/month. This is approximately 1.6% and 1.01% paid for sewer and water respectively of the 2006-10 estimated median household income for the community. Combined, the utility rate is equivalent to 2.7% of area MHI.

**5. Billing methods for the community systems** *Does the community use the property tax rolls to collect annually or semi-annually. Other services that might be on the same bill. Are bill paid by mail or is there an office drop off point. Discuss how this works for very small communities that do not have a formal billing process.*

The Tooleville Mutual Nonprofit Water Association, Inc. was formed in 2004. This formalized structure replaced an informal ownership framework that had been around since the 1960's. The Water Company operates its water system totally as an enterprise fund with all operating revenue generated from customer user fees. Customers pay in arrears. The water system's bookkeeper generates bills, collects payments, and makes deposits to a bank account. Residents mail payments to the Water Company's post office box in Exeter. The Company only accepts checks and money orders.

Tooleville is also served by a wastewater collection and treatment system that is operated by Tulare County (Tulare County Service Area #1 Tooleville Zone of Benefit). User fees for wastewater are collected via property taxes.

#### **6. Are systems in the black or in debt?**

The Tooleville sewer system is in debt to Tulare County, which has been subsidizing the operation of the plant for years. Repeated efforts on the part of the County to increase the user fees have been blocked by residents under Prop 218. Residents have blocked proposed increases in 2010, 2011 and 2012. As a result, the County keeps piling up "debt" against the system.

The Tooleville Mutual Nonprofit Water Association is not in debt at this time. Their recent distribution system improvement was paid for with a USDA grant.

In the fiscal year 2010-11, the water system's financial situation was as follows:

Cash beginning of year	\$	\$31,203.93
Operating Income	\$	\$35,030.00
Operating Expense	\$	\$38,602.26
Depreciation	\$	\$12,456.25
Operating Exp (w/o Dep)	\$	\$0.00
Nonoperating Revenue	\$	\$0.00
Nonoperating Expenses	\$	\$0.00
Cash end of year	\$	\$35,734.66
Change In Net Assets	\$	-\$8,066.64

**6. Are systems run as a business or are the systems dealt with more issue by issue as they come**

The water system is improving its financial situation and has been able to build up sufficient reserves to handle moderately sized emergencies without relying on outside help, such as the \$25,000 pressure tank replacement required in 2011. However, since the community is built out and no new connections are ever added, there is no source of funds for capital reserves (i.e. no capacity fees at hookup). Any capital improvements must be done with outside funding, and the small ratepayer base (and severely low incomes) makes most loan funding unaffordable.

**7. Range of household budgets in the community** *Discuss how much is spent on utilities such as sewer and water, if known. Are there discretionary funds in the typical households. If water or sewer rates go up what might get cut.*

Census data does not accurately reflect income ranges for Tooleville. The table below shows margins of error in excess of the estimates:

Tooleville CDP, California	Annual Household Income Estimate	Margin of Error
Less than \$10,000	16.4%	+/-31.8
\$10,000 to \$14,999	0.0%	+/-40.2
\$15,000 to \$24,999	23.9%	+/-33.2
\$25,000 to \$34,999	0.0%	+/-40.2
\$35,000 to \$49,999	16.4%	+/-29.6
\$50,000 to \$74,999	0.0%	+/-40.2
\$75,000 to \$99,999	43.3%	+/-49.6
\$100,000 to \$149,999	0.0%	+/-40.2
\$150,000 to \$199,999	0.0%	+/-40.2
\$200,000 or more	0.0%	+/-40.2
Median income (dollars)	43,977	+/-101,562

The community of Tooleville is severely disadvantaged. 2005 Community Survey results indicated an MHI of 26% of the statewide MHI. The survey data provided the following ranges of income at that time:

Tooleville SURVEY, California	Annual Household Income Estimate
Less than \$10,000	3.2%
\$10,000 to \$14,999	44.3%
\$15,000 to \$24,999	32.8%
\$25,000 to \$34,999	14.8%
\$35,000 to \$49,999	4.9%
\$50,000 to \$74,999	0
\$75,000 to \$99,999	0
\$100,000 to \$149,999	0
\$150,000 to \$199,999	0
\$200,000 or more	0
Median income (dollars)	\$15,500

Other data from the community survey included:

Average number of persons per household	4.16
Ethnicity of Head of Household	
Hispanic	45 74%
White	16 26%
Households with persons over age 62	7
Households with children	22
Households using bottled water	49
Households treating own water	19

An estimated 80% of households have annual incomes less than \$25,000 and 95% of households have annual incomes less than \$35,000. The 2006-10 ACS indicates that 80.0% +/- 22.9% of Tooleville residents live below the poverty line. As such, there is very little disposable income in the community.

### 8. Population served

The 2010 United States Census reported that Tooleville had a population of 339. The population density was 5,077.3 people per square mile. The racial makeup of Tooleville was 145 (42.8%) White, 5 (1.5%) African American, 19 (5.6%) Native American, 8 (2.4%) Asian, 2 (0.6%) Pacific Islander, 148 (43.7%) from other races, and 12 (3.5%) from two or more races. Hispanic or Latino of any race were 279 persons (82.3%).

The average household size was 4.35. There were 82 housing units at an average density of 1,228.1 per square mile, of which 49 (62.8%) were owner-occupied, and 29

(37.2%) were occupied by renters. The homeowner vacancy rate was 0%; the rental vacancy rate was 6.5%. 205 people (60.5% of the population) lived in owner-occupied housing units and 134 people (39.5%) lived in rental housing units

**9. Short description of water systems and sewer systems including number of connections adequacy of backup systems and MCL challenges if known.**

The Tulare County Service Area #1 Tooleville Zone of benefit provides sewer service to the community.

The Tooleville Mutual Nonprofit Water Association, Inc. has 76 connections servicing 77 residences.

The system has two water wells that supply the community. In recent years, both wells have produced water that violates the nitrate MCL. Interestingly, for about the past three years, the nitrate levels in both wells have dropped below 45ppm. The system relies primarily on the "Morgan" well (located on Morgan St) and uses "Alfred" well as a backup. Alfred well kicks in automatically when it is needed to keep system pressure high.

The distribution system was replaced entirely in 2009 with a USDA grant. Unfortunately, total coliform bacteria has plagued the system since that time. It is unknown whether the system was not sufficiently flushed at installation, or whether there is a cross-contamination problem (at least two old wells are known to exist and the water company has been unable to prove that they are connected to household plumbing that could be creating a cross-contamination situation). Routine flushing at hydrants on a monthly basis seems to be keeping the problem in check, but on average there are about two bacteriological violations per year.

**10. Existing governing body such as County Service District, Public Utility District, Mutual water system, etc.**

The Tooleville Mutual Nonprofit Water Association, Inc. is governed by a 5 member Board of Directors. Like many mutuals, Tooleville has a hard time keeping its board of directors full, but the past 5 or so years have seen only a little bit of turnover. It helps that the board pays a monthly stipend to directors who are present at each month's meeting. The stipend is \$40, equivalent to one month's water bill. To deter rumors that directors get "free water," each director actually receives a check, not a waiver of their bill.

**11. Decision making process** *Is there a board of directors, designated lead home owner, long time unofficial leader, or is there a lack of good decision making process. History on this would be good.*

The board currently meets every other month. There are a couple of families, the Enloes and the Baileys, who have lived in Tooleville since time immemorial and have long-term knowledge of the water system. Both families remain involved in running the water system, or at least staying in touch with what is happening. This is a valuable resource. Again, like many mutuals, it is rare to get a majority of shareholders at annual meetings, so the bylaws were amended to require only a 20% presence to achieve a quorum.

## **12. Discussion of operation and maintenance personnel for each community**

*Part-time or full time personnel, contractors used, any shared human resources with other communities or agencies.*

The water system has two professional support personnel: a bookkeeper who is actually an employee of the company, and a D3 operator who is a contractor. The operator calls out a well or pipe repair company as needed for major repairs.

## **13. Discuss how district is managed such as independent manager, County personnel involved, CDPH personnel involved** *Is the California Public Utilities Commission involved on rate setting or is it a local decision?*

The board makes the decisions at its semi-monthly meetings. The bookkeeper receives the mail, so she makes sure that state filings happen, that taxes are filed, bills paid and revenue deposited, etc. The operator visits weekly or as needed to check the system, flush lines, pull samples, etc. Tulare County takes bacteriological samples.

Since the Tooleville Mutual Nonprofit Water Association, Inc. has less than 200 connections, the system is monitored by the Tulare County Health & Human Services Agency, Tulare County Public Health Environmental Health Division. Tulare County is the Local Primacy Agency under the State Department of Public Health in monitoring compliance for and in enforcing EPA's Safe Drinking Water Act.

As a Mutual, the system is not regulated by the PUC.

## **14. Discuss problems that have been solved by community that could be applied as solutions by other communities.**

The local Board and water company membership have made strides towards the eventual resolution of their water system problems. They have successfully applied for CDBG and USDA funding that was used to drill a water test well and replace the water distribution system. The Tooleville Mutual Nonprofit Water Association, Inc. has also successfully applied for and received a commitment for a Prop 84 planning grant from CDPH to design a source of water by drilling a new well on the west side of Exeter (where higher-quality water is known to exist), wheeling that water through that city to a

connection point where a transmission line would transport water to the Tooleville water distribution system.

**15. Discuss largest unresolved problems/issues for the community and what is being considered to solve these problems, if any.**

The Tooleville Mutual Nonprofit Water Association, Inc. water system has had sporadic nitrate problems and uncertainty since the late 1990s. Low system pressure was frequently a problem until the distribution system was replaced, and that seems to have helped.

Consolidation with the City of Exeter could be a good way to resolve the water quality problems of residents served by the Tooleville Mutual Nonprofit Water Association, Inc. Unfortunately, however, both communities are more or less opposed to full consolidation. Exeter maintains that it does not have the resources to own or manage Tooleville's system. It also remains concerned about the charter city prevailing wage exemption that Exeter fears could be lost to them if they serve an outlying community. This problem was theoretically resolved by SB2X9 in 2009 but it has not yet been tested in court, so Exeter prefers to err on the side of caution in this case. For its part, Tooleville's board of directors is not interested in being a charity case, and would prefer to continue owning and operating their own system. A partial consolidation has also been considered (buying water in bulk through a master meter) but is not currently favored, due to risk on the part of the water company (which would have to cover every month's bill, regardless of collection problems or other revenue issues) and Exeter's unwillingness to help with billing and maintenance.

# TRACT 92

51-200 Connections Range  
(\_\_\_\_ Connections)

## Location and introduction:

The Tulare County community of Tract 92, also known as Union Addition is located between the City of Visalia and City of Farmersville roughly a half mile south of Caldwell Avenue along Road \_\_\_\_.

### 1. When was community established and why

Tract 92, also known as Union Addition, was laid out in \_\_\_\_\_.

### 2. How old are the systems

The Tract 92 CSD was formed in \_\_\_\_\_ to operate a community water system. Previous to this residents depended on private domestic wells for their water. Though the water system has existed for \_\_\_\_ years, there are still scores of old abandoned private wells that have not been used for decades(?). As such, these old wells have the potential to serve as conduits for contaminates water to enter local groundwater supply.

### 3. Median household income

Per the last decennial census to calculate median household income, the 2000 Census indicated the median annual income for households in Tulare County Census Tract 16.02 Block Group 2 that incorporates the community of Tract 92, was \$21,406 or 45.1% of the statewide median household income at that time. Since then the US Census Bureau no longer asks the income question in the decennial census, but rather collects income data through the continually occurring American Community Survey where a smaller sampling is done annually. This data is expressed as a 5-year adjusted average. The median annual household income for the past two rounds is expressed as:

<u>Period</u>	<u>MHI</u>	<u>Margin of Error</u>	<u>% of State MHI</u>
2005-09	\$32,400	+/- \$10,516	53.6%
2006-10	\$ _____	+/- \$ _____	____%

### 4. Monthly sewer rates and water rates, if known.

There is no sewer service in Tract 92. The community is dependent on individual septic tank systems for sewage disposal. The current monthly flat water rate is \$ \_\_\_\_\_. This is approximately \_\_\_\_\_% of the 2006-10 estimated median household income for the community.

**5. Billing methods for the community systems** *Does the community use the property tax rolls to collect annually or semi-annually. Other services that might be on the same bill. Are bill paid by mail or is there an office drop off point. Discuss how this works for very small communities that do not have a formal billing process.*

The Tract 92 CSD

**6. Are systems in the black or in debt?**

The Tract 92 CSD

In the fiscal year 2010-11, the District's financial situation was as follows:

<u>Description</u>	<u>Water System</u>
Cash beginning of year	\$
Operating Income	\$
Operating Expense	\$
Depreciation	\$
Operating Exp (w/o Dep)	\$
Nonoperating Revenue	\$
Nonoperating Expenses	\$
Cash end of year	\$
Change in Net Assets	\$
Interest Paid	\$

**7. Are systems run as a business or are the systems dealt with more issue by issue as they come**

The District operates as a business, but has its challenges. For example,

A recent (2011) Municipal Services Review (MSR) by Tulare County LAFCO makes the following conclusion:

...[T]he District.

**8. Range of household budgets in the community** *Discuss how much is spent on utilities such as sewer and water, if known. Are there discretionary funds in the typical households. If water or sewer rates go up what might get cut.*

Tract 92 is a severely disadvantaged community, with 2006-10 ACS MHI indicating an MHI at less than 60% (?) of the statewide MHI. The 2006-10 ACS indicates the following range of household incomes in the community:

Tulare County CT 16.02 BG2, California	Annual Household Income Estimate	Margin of Error
Less than \$10,000	%	+/-
\$10,000 to \$14,999	%	+/-
\$15,000 to \$24,999	%	+/-
\$25,000 to \$34,999	%	+/-
\$35,000 to \$49,999	%	+/-
\$50,000 to \$74,999	%	+/-
Median income (dollars)	\$	+/- \$

An estimated \_\_\_\_% of households have annual incomes less than \$25,000 and \_\_\_\_% of households have annual incomes less than \$35,000. As such, there is very little disposable income in the community.

**9. Population served**

**10. Short description of water systems and sewer systems including number of connections adequacy of backup systems and MCL challenges if known.**

There is no community wide sewer system in Tract 92. The community depends on individual on-site septic tank systems for wastewater disposal.

The Tract 92 CSD has \_\_\_\_ active connections servicing \_\_\_\_ residences and one church.

The two District water wells that supply the community produce water that ...

**11. Existing governing body such as County Service District, Public Utility District, Mutual water system, etc.**

The Tract 92 Community Services District provides water service to the unincorporated community of Tract 92 (AKA Union Addition). The District is governed by a 5-member board of directors.

**12. Decision making process** *Is there a board of directors, designated lead home owner, long time unofficial leader, or is there a lack of good decision making process. History on this would be good.*

The Tract 92 CSD Board of Directors is in charge of the decision making process related to the community's water system. This applies to policy decisions and other major decisions. The District General Manager provides the overall management of the system.

**13. Discussion of operation and maintenance personnel for each community**

*Part-time or full time personnel, contractors used, any shared human resources with other communities or agencies.*

The District has

**14. Discuss how district is managed such as independent manager, County personnel involved, CDPH personnel involved** *Is the California Public Utilities Commission involved on rate setting or is it a local decision?*

The District has

Since the Tract 92 CSD water system has less than 200 connections, the system is monitored by the Tulare County Health & Human Services Agency, Tulare County Public Health Environmental Health Division. Tulare County is the Local Primacy Agency under the State Department of Public Health in monitoring compliance for and in enforcing EPA's Safe Drinking Water Act.

No CPUC. Most of their functions are entirely internal (budgeting, billing, operations, etc). The exception is their banking relationship with the Tulare County Treasurer (?).

**15. Discuss problems that have been solved by community that could be applied as solutions by other communities.**

Tract 92 has been making strides towards the eventual resolution of their bacteriological problem. The District has successfully applied for and received a planning DWSRF grant/loan from CDPH and a CDBG P&TA grant to plan and design improvements to the water system to resolve the bacteriological problem. In addition, the District has applied for CDPH Prop 50 funds for construction of the recommended improvements.

**16. Discuss largest unresolved problems/issues for the community and what is being considered to solve these problems, if any.**

Tract 92

The 2011 LAFCO MSR makes the following comment regarding:

**XXXXXX.**

# WEST GOSHEN MUTUAL WATER COMPANY

51-200 Connections Range  
(101 Connections) get exact #

## Location and introduction:

The Tulare County community of West Goshen is located approximately a mile and a half west of the town of Goshen along Avenue 308.

### 1. When was community established and why.

Check county records...

### 2. How old are the systems.

The mutual water company was incorporated in 1967 to meet the water supply needs of a concentrated area of homes west of the community of Goshen, known as West Goshen. The community's two wells were drilled in 1968 and 1976, respectively, and the distribution system was constructed in late 1968 and 1969. The distribution system is composed of AC transmission lines, cast iron fittings and polyethylene service laterals. It is not "looped" (i.e. it has dead ends). The two wells both feed into a 5000 gallon hydropneumatic tank. Both wells are at or nearing the end of their useful lives. Apparently local soils have a high "blue sand" content that is very sticky, passes through gravel pack and wreaks havoc on pump bowls.

In Well 1, a five-year old turbine pump recently failed due to sanding and multiple compression breaks in the casing. The well was one-third-filled in with gravel and sand, material that was extremely difficult to airlift out. (This was a known condition prior to this outage.) Repairs are ongoing and the well is currently offline. Well #2 (equipped with a small 15hp submersible) supplied water until the motor burned out on Oct 31. The pump was replaced with CDPH emergency grant funding and the community is once more relying on it (it's a backup source and is not used under normal circumstances). Both wells are contaminated with nitrate that slightly exceeds the MCL.

### 3. Median household income

Per the last decennial census to calculate median household income, the 2000 Census indicated the median annual income for households in Tulare County Census Tract 9 Block Group 3 that incorporates the community of West Goshen, was \$36,528 or 76.9% of the statewide median household income at that time. Since then the US Census

Bureau no longer asks the income question in the decennial census, but rather collects income data through the continually occurring American Community Survey where a smaller sampling is done annually. This data is expressed as a 5-year adjusted average. In 2010 West Goshen became a Census Designated Place (CDP). The median annual household income for the past two rounds is expressed as:

<u>Period</u>	<u>Area</u>	<u>MHI</u>	<u>Margin of Error</u>	<u>% of State MHI</u>
2005-09	CT9BG3	\$52,500	+/- \$13,971	86.9%
2006-10	CDP	\$41,250	+/- \$8,558	72.0%

Though the CDP data appears to be more representative, a community survey would be in order to more accurately determine the MHI for the West Goshen area.

#### **4. Monthly sewer rates and water rates, if known**

No sewer. Water rates were \$45 until a recent increase to \$50, prompted by the failure of both wells.

#### **5. Billing methods for the community systems**

*Does the community use the property tax rolls to collect annually or semi-annually. Other services that might be on the same bill. Are bill paid by mail or is there an office drop off point. Discuss how this works for very small communities that do not have a formal billing process.*

Rates are flat so there is no meter reading. This mutual water company has no authority to collect taxes so all billing is done directly (by mail). A treasurer/bookkeeper is paid a small stipend to mail bills, collect payments via the PO Box, and keep the books. She is not a professional bookkeeper, but a (former) community resident who has some skill with books. There is no office nor any central location at all; files are kept rather haphazardly by current board members. There is a desire to construct a shed at the well site where tools and records could be stored, but it hasn't happened yet. In the past, files have allegedly been damaged by flood or fire, and probably some have been destroyed and/or lost.

#### **6. Are systems in the black or in debt?**

Currently, the system carries no debt, but they struggle to keep afloat. In 2007, the water company nearly defaulted on year 39 of a 40-year USDA loan because the board of directors walked away. A new board stepped up and the payment was made, but there was virtually no money in the bank at the time. They've slowly built up a small reserve, but usually when repairs are needed, they are forced to make payment arrangements with the vendor/consultant.

**7. Are systems run as a business or are the systems dealt with more issue by issue as they come up?**

*Are systems run as a business or are the systems dealt with more issue by issue as they come up?*

Issue by issue. The water company does put money into reserves but they haven't yet managed to put away enough to carry them through any but the most minor of operational problems.

**8. Range of household budgets in the community.**

*Discuss how much is spent on utilities such as sewer and water, if known. Are there discretionary funds in the typical households. If water or sewer rates go up what might get cut.*

West Goshen CDP, California	Annual Household Income Estimate	Margin of Error
Less than \$10,000	7.0%	+/-12.6
\$10,000 to \$14,999	0.0%	+/-26.2
\$15,000 to \$24,999	24.0%	+/-30.1
\$25,000 to \$34,999	0.0%	+/-26.2
\$35,000 to \$49,999	42.6%	+/-24.5
\$50,000 to \$74,999	21.7%	+/-20.4
\$75,000 to \$99,999	2.3%	+/-4.3
\$100,000 to \$149,999	2.3%	+/-3.9
\$150,000 to \$199,999	0.0%	+/-26.2
\$200,000 or more	0.0%	+/-26.2
Median income (dollars)	41,250	+/-8,558

An estimated 31% of households have annual incomes less than \$25,000. The 2006-10 ACS indicates that 5.3% +/- 7.2% of Tooleville residents live below the poverty line.

**9. Population served**

The 2010 United States Census reported that West Goshen had a population of 511. The population density was 433.9 people per square mile. The racial makeup of West Goshen was 276 (54.0%) White, 2 (0.4%) African American, 10 (2.0%) Native American, 7 (1.4%) Asian, 0 (0.0%) Pacific Islander, 195 (38.2%) from other races, and 21 (4.1%) from two or more races. Hispanic or Latino of any race were 358 persons (70.1%).

The average household size was 3.68. There were 143 housing units at an average density of 121.4 per square mile, of which 72 (51.8%) were owner-occupied, and 67 (48.2%) were occupied by renters. The homeowner vacancy rate was 1.4%; the rental vacancy rate was 4.3%. 269 people (52.6% of the population) lived in owner-occupied housing units and 242 people (47.4%) lived in rental housing units.

#### **10. Short description of water systems and sewer systems including number of connections adequacy of backup systems and MCL challenges if known.**

In addition to the nitrate MCL violation and well/pump failures noted in the first paragraph of this document, the community also faces capacity challenges. In the late 1990s, when there were about 80 households on the system, the addition of any more customers was discouraged in a report by Ingram Digital Electronics. Nonetheless, there are now just over 100 homes on the system and the board of directors is very concerned about overburdening the system. A new well has been recommended for years, to be located somewhere in the southeastern area of the system. (It's unknown why Well 2, the backup well, was located only 100' from Well 1, and on the same site. This provides little in the way of redundancy or additional supply, since both wells feed into the same tank and the same lines.) Capacity concerns are only worsened by the fact that many parcels in West Goshen are on the large side, with livestock, pasture and gardens, including marijuana gardens, making a big demand on water supplies.

#### **11. Existing governing body such as County Service District, Public Utility District, Mutual water system, etc.**

The West Goshen Mutual Water Company is the only formal entity that exists in West Goshen. The directors are elected by the shareholders of the Company.

#### **12. Decision making process**

*Is there a board of directors, designated lead home owner, long time unofficial leader, or is there a lack of good decision making process. History on this would be good*

#### **PAUL WHAT DO YOU KNOW HERE?**

#### **13. Discussion of operation and maintenance personnel for each community**

*Part-time or full time personnel, contractors used, any shared human resources with other communities or agencies.*

Currently, one of the directors holds a D1 license and serves as the water system's operator. He receives no compensation for this service. The bookkeeper does receive a small stipend (\$100/month?). For distribution system repairs, the company calls in Andrews Backhoe. For well repairs, they usually work with Ingram Equipment. They hired AECOM to do a brief engineering analysis in 2009 but have not maintained any further working relationship with them.

**14. Discuss how district is managed such as independent manager, County personnel involved, CDPH personnel involved.**

*Is the California Public Utilities Commission involved on rate setting or is it a local decision?*

No CPUC; rates are a board decision and are not subject to Prop 218. There is no manager; all decisions are made by the board. Tulare County is LPA.

**15. Discuss problems that have been solved by community that could be applied as solutions by other communities.**

Having a board member serve as volunteer D1 operator is very helpful to West Goshen but is probably not practical in every community. The board holds its meetings in a nearby Subway restaurant, which seems to make people more comfortable attending meetings. When larger annual meetings of shareholders are held, they meet in a nearby church.

**16. Discuss largest unresolved problems/issues for the community and what is being considered to solve these problems, if any.**

West Goshen's wells need replacement, or another solution is needed. There is no doubt that Well 1 will not survive much longer, even if patches are put on the casing and the pump rebuilt (which is the current plan). This is a good moment to explore the options available to them. They are located about 1.5-2 miles from Goshen. Goshen, although governed by Goshen CSD, is served by CalWater. Consolidation is a possibility, but not a popular idea among residents. The age of facilities, contamination and capacity problems described herein could be simultaneously addressed with a new source of water.

# LONDON

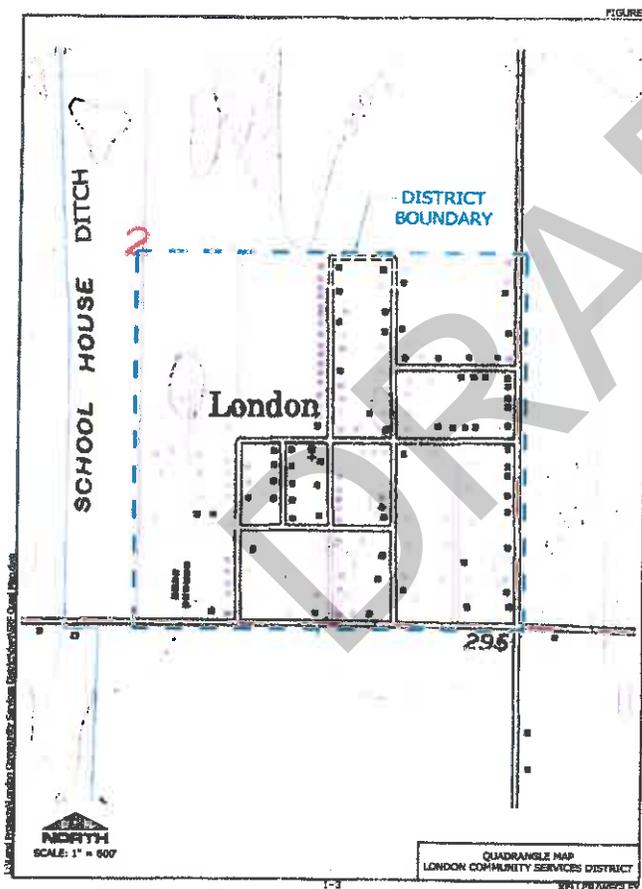
201-500 Connections Range  
(420 Connections) get exact #

## Location and Introduction

The Tulare County community of London is located....

Information to be included for each community:

### 1. When was community established and why



Map of London showing neighboring communities

The community of London was established in

## 2. How old are the systems

The District's existing water distribution system is old and predominantly consists of undersized pipelines. The majority of the distribution system was installed in the early 1950's.

### Map of London CSD and Sphere

## 3. Median household income

Per the last decennial census to calculate median household income, the 2000 Census indicated the median annual income for households in Tulare County Census Tract 3.02 Block Group 2 that incorporates the community of London, was \$21,678 or 45.6% of the statewide median household income at that time. Since then the US Census Bureau no longer asks the income question in the decennial census, but rather collects income data through the continually occurring American Community Survey where a smaller sampling is done annually. This data is expressed as a 5-year adjusted average. The median annual household income for the past two rounds is expressed as:

Period	Area	MHI	Margin of Error	% of State MHI
2005-2009	CTBG	\$38,701	+/- \$5,934	64.1%
2006-2010	CDP	\$29,853	+/- \$16,344	52.1%

## 4. Monthly sewer rates and water rates, if known

The current water rate is \$\_\_\_\_/month. The sewer rate is \$\_\_\_\_/month. These rates are \_\_\_\_% and \_\_\_\_% respectively of the 2006-10 estimated median household income for the community.

**5. Billing methods for the community systems** *Does the community use the property tax rolls to collect annually or semi-annually. Other services that might be on the same bill. Are bill paid by mail or is there an office drop off point. Discuss how this works for very small communities that do not have a formal billing process.*

The District financially operates its water and sewer systems primarily as enterprise funds with almost all operating revenue generated from customer user fees and some

property taxes. Customers pay in arrears for water and sewer service. The office manager generates bills, collects payments, and makes deposits to the Tulare County Treasurer's office in Visalia. Residents can mail or drop off payments at the LCSD office, but with no post office in town, most people drop off payments at the office. The office accepts cash, checks and money orders (?). The District (which utilizes the County of Tulare Treasury as its depository(?)) pays its bills by utilizing the County's Auditor-Controller's office to issue warrants (checks). Payment vouchers and an Order to Disburse Funds are approved monthly by the Board of Directors directing the County to issue warrants. When issued, the warrants are mailed to the LCSD thence the District general manager mails the warrants to vendors. This warrant process, depending on the dates vouchers are submitted takes anywhere from 2 to 4 weeks to issue a warrant. Though somewhat time consuming, this process consists of some additional oversight and documentation for each payment issued.

**6. Are systems in the black or in debt?**

The London CSD ...

In the fiscal year 2009-10, the District's financial situation was as follows:

Description	Water System	Sewer System
<b>Cash beginning of year</b>		
<b>Operating Income</b>	\$182,583	\$160,105
<b>Operating Expense</b>	\$169,741	\$112,450
<b>Depreciation</b>	\$2,674	\$22,629
<b>Operating Exp. (w/o Dep.)</b>	\$167,067	\$89,821
<b>Non-operating Revenue</b>	\$11,991	\$11,990
<b>Non-operating Expenses</b>		
<b>Cash end of year</b>		
<b>Change in Net Assets</b>		
<b>Interest Paid</b>		

**7. Are systems run as a business or are the systems dealt with more issue by issue as they come?**

The LCSD District operates as a business, but has its challenges.

A recent (2011) Municipal Services Review (MSR) by Tulare County LAFCO makes the following conclusion:

...[T]he.

**8. Range of household budgets in the community** *Discuss how much is spent on utilities such as sewer and water, if known. Are there discretionary funds in the typical households. If water or sewer rates go up what might get cut.*

London is severely disadvantaged, with 2006-10 ACS MHI indicating an MHI at about 52% of the statewide MHI. The 2006-10 ACS indicates the following range of household incomes in the community:

London CDP, California	Annual Household Income Estimate	Margin of Error
<b>Less than \$10,000</b>	16.1%	+/- 11.1
<b>\$10,000 to \$14,999</b>	12.5%	+/- 7.5
<b>\$15,000 to \$24,999</b>	10.5%	+/- 8.3
<b>\$25,000 to \$34,999</b>	13.0%	+/- 9.0
<b>\$35,000 to \$49,999</b>	26.0%	+/- 10.5
<b>\$50,000 to \$149,999</b>	22.0%	+/- 26.1
<b>Median Income (dollars)</b>	<b>\$29,853</b>	<b>+/- \$16,344</b>

An estimated 52.1% of households have annual incomes less than \$35,000. The 2006-10 ACS indicates that 42.8% +/- 14.8% of London residents live below the poverty line. As such, there is very little disposable income in the community.

London families in general don't have any room for flexibility in their budgets. Many families depend on farm labor for their major source of revenue so their incomes fluctuate seasonally. There are also many residents who depend on fixed-income sources such as disability and social security.

## **9. Population served**

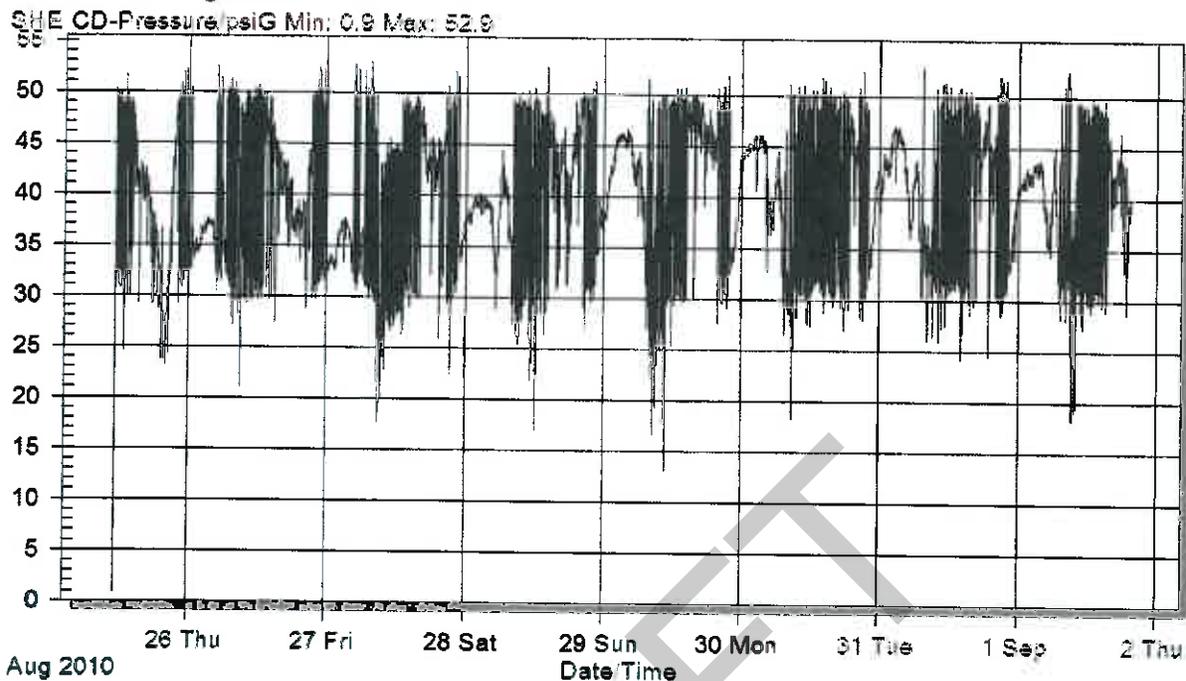
The 2010 United States Census reported that London had a population of 1,869. The population density was 2,970.0 people per square mile. The racial makeup of London was 761 (40.7%) White, 6 (0.3%) African American, 46 (2.5%) Native American, 0 (0.0%) Asian, 0 (0.0%) Pacific Islander, 976 (52.2%) from other races, and 80 (4.3%) from two or more races. Hispanic or Latino of any race were 1,737 persons (92.9%).

The average household size was 4.76. There were 408 housing units at an average density of 648.3 per square mile (250.3/km<sup>2</sup>), of which 157 (39.9%) were owner-occupied, and 236 (60.1%) were occupied by renters. The homeowner vacancy rate was 0.6%; the rental vacancy rate was 1.7%. 691 people (37.0% of the population) lived in owner-occupied housing units and 1,178 people (63.0%) lived in rental housing units.

## **10. Short description of water systems and sewer systems including number of connections adequacy of backup systems and MCL challenges if known**

The LCSD has \_\_\_\_ active connections servicing \_\_\_\_ residences, \_\_\_\_ stores and \_\_\_\_ churches. The majority of the distribution system was installed in the early 1950's and there are very few sectionalizing valves installed in the system. The installation of sectionalizing valves is necessary to have a functional water system. The polybutylene material used for the water services is failing and needs to be replaced. Furthermore, due to the lack of such valves, the District is unable to isolate portions of the system to repair pipeline and service leaks. This requires the draining of the entire or at least the majority of the water system to repair a leak. This can result in all of the residents being without water until the leak is repaired and the distribution system recharged. The condition of supply wells, pumps and pipelines is very deteriorated and it is not uncommon for water system pressure to fall below the water works standard of 20 psi.

## London Community Services District: Aug 26-Sep 2, 2010



*The feasibility study indicates that the majority of the water system which was installed in 1952, consists of thousands of feet of undersized and deteriorating pipeline, three water wells and one hydropneumatic tank. Furthermore, the study showed that the community lacks adequate fire protection due to lack of pressure in the system and undersized wharf hydrants. The District has had to repair leaks in the distribution system both on water mains and service connections. A serious health risk is posed whenever the system is shut down due to leak repairs. The water lines have few gate valves so when leaks occur all or most of the system must be shut down. When the water system is shut down and the pressure drops, backflow conditions can occur that can allow seepage into the distribution system thereby creating a potential health hazard.*

### **11. Existing governing body such as County Service District, Public Utility District, Mutual water system, etc.**

The London Community Services District provides water and sewer services to the unincorporated Tulare County community of London. The District is governed by a 5-member board of directors.

### **12. Decision making process** *Is there a board of directors, designated lead home owner, long time unofficial leader, or is there a lack of good decision making process. History on this would be good.*

The London CSD Board of Directors is in charge of the decision making process related to the community's water system. This applies to policy decisions and other major decisions. The District Office Manager provides the overall management of the system.

### **13. Discussion of operation and maintenance personnel for each community**

*Part-time or full time personnel, contractors used, any shared human resources with other communities or agencies.*

The District has one full-time (\_\_\_-hour) office/general(?) manager. Currently the District also employs a second part-time office worker. The District contracts (?) with a bookkeeping firm to keep the books and assist the manager and clerical employee with issues that arise.

A District employs a part-time(?) maintenance system employee who is available for assistance at times when needed.

The District contracts with California Water Services (Tito Balling of Coalinga) for operation of the wastewater treatment plant.

### **14. Discuss how district is managed such as independent manager, County personnel involved, CDPH personnel involved Is the California Public Utilities Commission involved on rate setting or is it a local decision?**

The District has

Since the LCSD water system has more than 200 connections, and as such the system is directly regulated by the State Department of Public Health in monitoring compliance for and in enforcing EPA's Safe Drinking Water Act.

No CPUC. Most of their functions are entirely internal (budgeting, billing, operations, etc). The exception is their banking relationship with the Tulare County Treasurer(?).

### **15. Discuss problems that have been solved by community that could be applied as solutions by other communities.**

London has had success in securing funding to improve both its water and sewer systems. USDA funds earlier... SWRCB ARRA funding to upgrade wastewater treatment plant.

On the water side, the District has been successful in receiving DWSRF grant and loan funding to drill a new well, build a water storage tank, and replace a large portion of the undersized and deteriorated water distribution system. New funding applications are being prepared/pending for additional CDPH funding to drill another well and replace additional portions of the distribution system.

**16. Discuss largest unresolved problems/issues for the community and what is being considered to solve these problems, if any.**

London's water system has issues with customer service lines and a lack of water meters.

The 2011 LAFCO MSR makes the following comment:

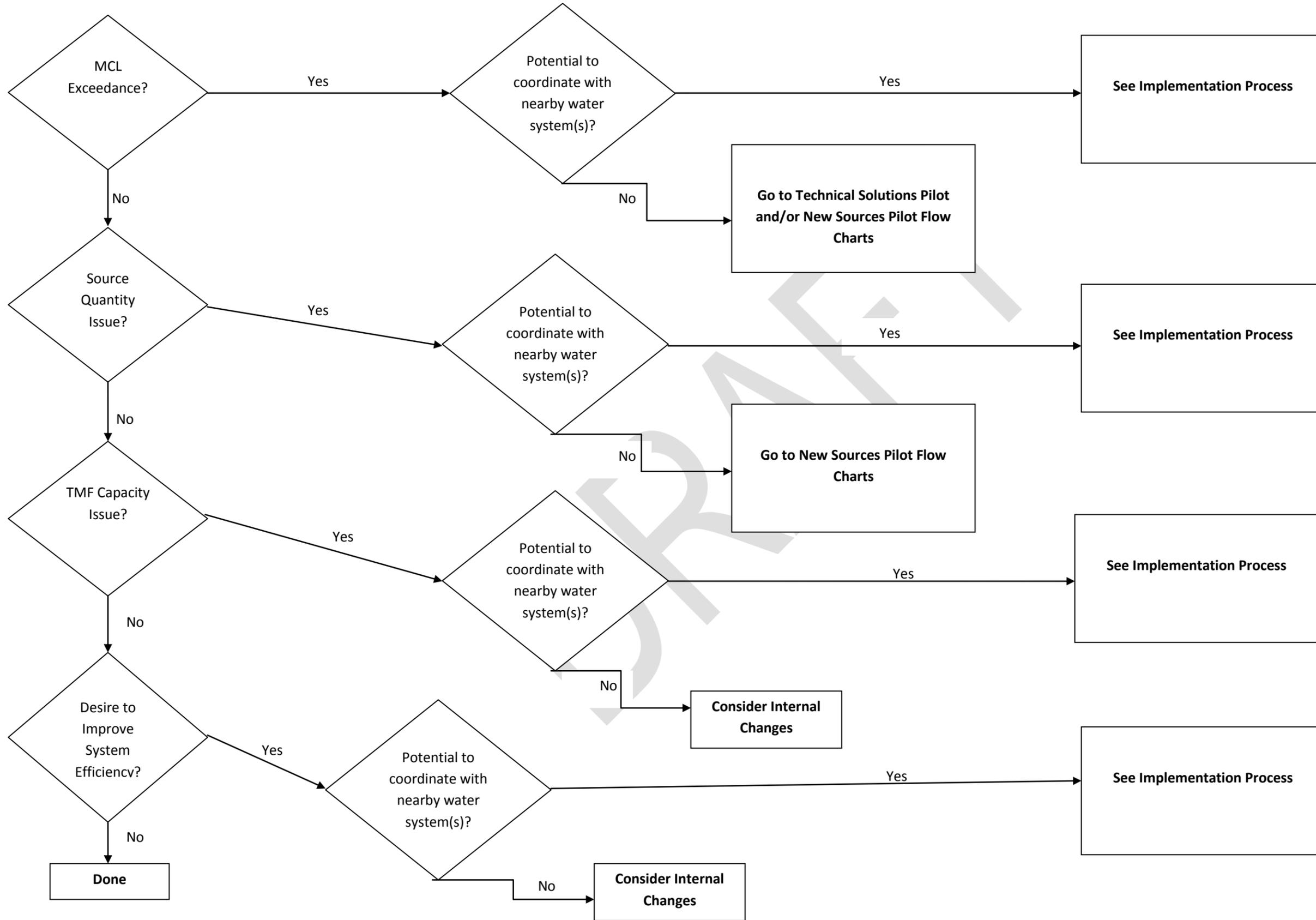
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DRAFT

**APPENDIX D**  
**FLOW CHARTS**

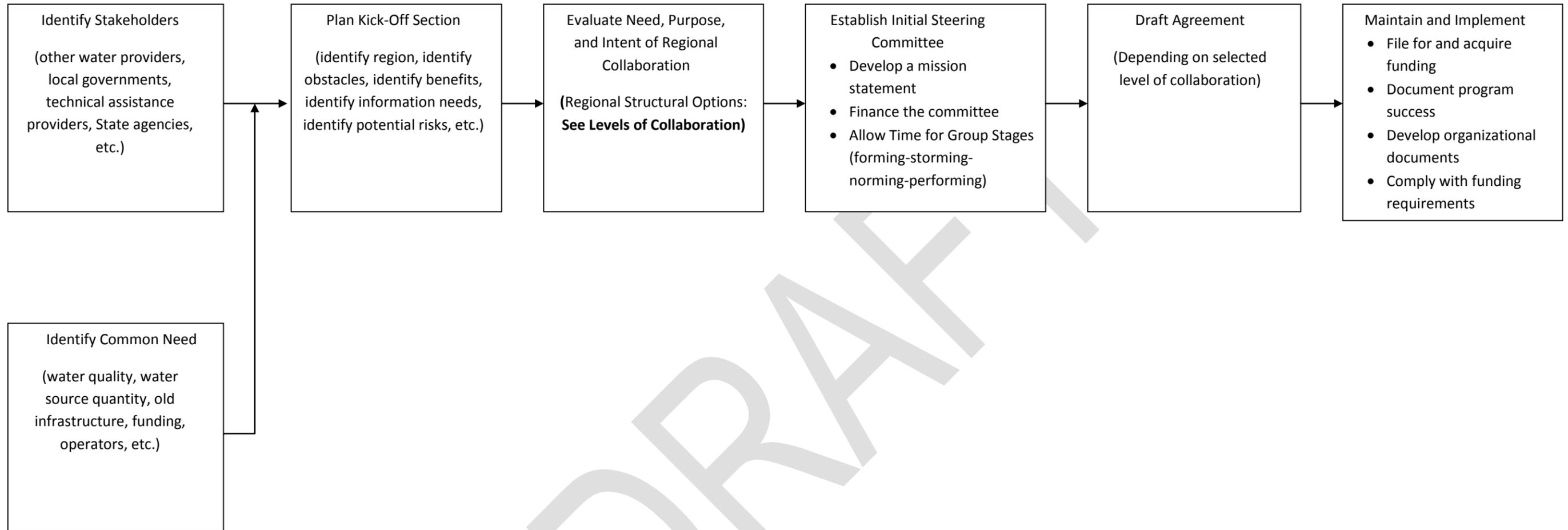
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MANAGEMENT AND NON-INFRASTRUCTURE SOLUTIONS EVALUATION

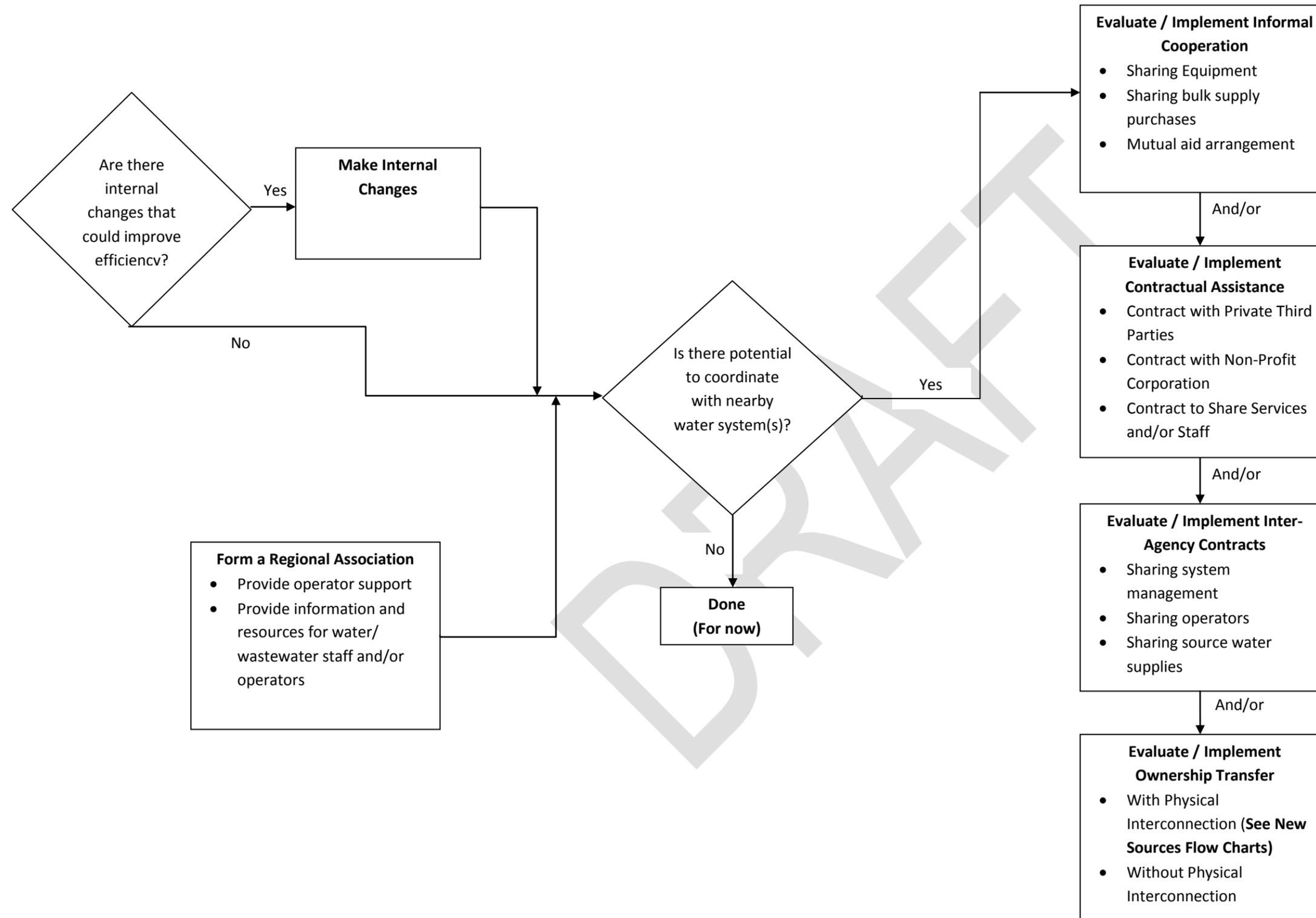


IMPLEMENTATION PROCESS

**Implementation Process**



**Levels of Collaboration**



**APPENDIX E**  
**SAMPLE MERGER PLAN**

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**[Attachment to come]**

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**APPENDIX F**  
**DEMONSTRATION PROJECTS**

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# DEMONSTRATION PROJECT DESCRIPTIONS

## 1 Demonstration Projects

This document provides descriptions of projects that have been completed, or are currently in progress, that depict the solutions discussed in the Management and Non-Infrastructure Solutions Pilot Report.

### 1.1 Contractual Assistance

[examples]

### 1.2 Inter-Agency Contracts

#### 1.2.1 Cutler-Orosi JPWA:

The Cutler-Orosi regional wastewater treatment plant serves a 23,040 acre rural area including the communities of Cutler, Orosi, Sultana, East Orosi, Seville, and Yettem, with a combined population of about 13,190 residents. The Cutler-Orosi Joint Powers Wastewater Authority (JPWA) operates the plant, which was originally constructed in 1958. The Cutler-Orosi JPWA was founded in XXXX, to [goal of JPWA].

#### 1.2.2 Alpaugh Joint Powers Authority:

From 2003 until December 2012, the Alpaugh water system system was managed by the Alpaugh Joint Powers Authority, a JPA between Alpaugh Irrigation District (AID) and Tulare County Waterworks District No. 1 (TCWWD). Previously, TCWWD provided domestic water to residents within the one-square-mile townsite of Alpaugh, and the AID provided domestic water to its more rural irrigation district customers for several square miles around Alpaugh. In 2003, the two agencies entered into a joint powers agreement to run the domestic water system, with each contributing its existing distribution system pipelines. AID also contributed the use its Well No. 45 (under lease to the AJPA), which exceeded even the old arsenic standard of 50 ppb. The use of this well was abandoned by the AJPA once AID Well 10 and AJPA Well 1 were completed. AID constructed and contributed Well 10 with USDA funding. The TCWWD contributed Well 1 and its well site with storage facilities, also financed by USDA, along with replacement of roughly 10 miles of distribution lines.

Per the joint powers agreement, the intent was for the Authority to be an interim measure, a step on the way to forming one public agency for the provision of water service to the entire Alpaugh area. The formation of a Community Services District was approved by Alpaugh voters on the November 2012 ballot.

The AJPA board of directors was comprised of six directors, three each from the two member agencies. All six were appointed by their parent agency and “...serve at the pleasure of the [agency] who appointed [them] and may be replaced at any time by the [agency] who appointed them.” (Joint Exercise of Powers Agreement, 2003) This has led to constant turnover and frequent partisanship, along with the obvious voting problems that come with a board comprised of an even number of directors. No provisions existed for tie-breaking votes.

The joint powers agreement also provided for an executive director appointed by the board. The executive director (ED) could be a member of the Board of Directors, or not; the ED could be the same person as the secretary and/or treasurer, or not. The joint powers agreement vested the ED with the authority to discipline employees and conduct day-to-day operation of the system. This, too, has proven problematic; sometimes the ED has been a volunteer and it's a rather large job for a volunteer to take on. The joint powers agreement did not specify the need for a general manager and so presumably meant for the ED to serve in such role. Prior to the dissolution of the AJPA in December 2012, the AJPA had a general manager in place whose contract identified him as the ED, essentially combining these two roles into one. The newly formed Alpaugh CSD hired the previous AJPA ED and the CSD's General Manager. The current manager/previous ED is a local resident, and has been able to get everyone moving in the same direction in a much more effective manner than previous EDs hired from outside.

### **1.3 Ownership Transfer – No Physical Connection**

[Alpaugh CSD]

### **1.4 Ownership Transfer – Physical Interconnection**

#### **1.4.1 Four Seasons MHP with City of Hanford**

- Problem (quantity, quality)
  - Quantity (86 mobile home units)
  - Arsenic exceeds the Federal limit of 10 ppb
- Solution
  - Annex to the City of Hanford
  - Extend City of Hanford Water Main to property
  - Destroy existing well
- Location
  - Approximately ¼ mile west of the City of Hanford
- Decision Making Process
  - Owner of Mobile Home Park
- Funding Source(s)
  - Proposition 84 (Feasibility Study Grant)
  - Proposition 84 (Construction Grant pending)

- Cost (application, design, capital, operations)
- Challenges
  - Funding to construct improvements
  - Payment of debt service for potential loan(s)
- Time Frame (identification of problem to completion of solution)
- Other

#### 1.4.2 Lacey Courts MHP with City of Hanford

- Problem (quantity, quality)
  - Quantity (20 mobile home units and one home)
  - Arsenic exceeds 10 ppb
- Solution
  - Annex to the City of Hanford
  - Destroy existing well
- Location
  - Lacey Courts Mobile Home Park is located near
- Decision Making Process
  - Owner of Mobile Home Park
- Funding Source(s)
  - Proposition 84 (Feasibility Study Grant)
- Cost (application, design, capital, operations)
- Challenges
- Time Frame (identification of problem to completion of solution)
- Other

#### 1.4.3 Hamblin MWC with City of Hanford

- Problem (quantity, quality)
  - Quantity (40 single family homes)
  - Arsenic exceeds 10 ppb
- Solution
  - Annex to the City of Hanford
  - Destroy existing well
  - Dissolve Mutual Water Company
- Location
  - Immediately surrounded by the City of Hanford
- Decision Making Process
  - Mutual Water Company
- Funding Source(s)
- Cost (application, design, capital, operations)

- Challenges
  - Lack of funds to pursue solutions (no reserves)
  - Age of existing system
- Time Frame (identification of problem to completion of solution)
- Other

#### 1.4.4 Lone Oak Subdivision with the City of Tulare

The Lone Oak Water System Improvements project through the Tulare County involved design and construction review services for a water system extension from the City of Tulare to the Lone Oak Subdivision. Responsibilities included preparation of legal descriptions for the water line easement across private property, coordination with the City of Tulare, County of Tulare, Tulare Irrigation District, Lone Oak Subdivision, Soult's Water Company, Self-Help Enterprises, and private property owners. The project included 924 linear feet of 12-inch water line, two canal crossings, connection to existing City of Tulare and Lone Oak water systems, and abandonment of the existing water supply well for the Lone Oak Subdivision. The project was funded through a Community Development Block Grant (CDBG). Challenges included construction of the new facilities and connection of existing services while maintaining water service to the existing homes.

- Problem (quantity, quality)
  - Quantity (42 single family homes)
  - Nitrate and uranium exceeded MCLs
- Solution
  - Annex to the City of Tulare
  - Destroy existing well
  - Dissolve Mutual Water Company
- Location
  - Adjacent to the City of Tulare
- Decision Making Process
  - Mutual Water Company
- Funding Source(s)
  - Community Development Block Grant
- Cost (application, design, capital, operations)
- Challenges
  - Maintaining water supply during construction
- Time Frame (identification of problem to completion of solution)
  - 2001
- Other

#### 1.4.5 El Rancho subdivision with City of Hanford

The water system improvements project involved design and construction of the water system approved for the El Rancho Subdivision in accordance with the SDWSRF and City of Hanford requirements. Improvements included approximately two miles of water distribution facilities to connect the El Rancho Subdivision to the City of Hanford's water system. Pipeline sizes range from 6-inch to 12-inch in diameter. This project also includes water meters for all connections within the subdivision.

- Problem (quantity, quality)
  - Quantity (142 single family homes)
  - Arsenic and Uranium
- Solution
  - Annex to the City of Hanford
  - Destroy existing well and remove water tanks
  - Kings County owns Curtis Water Company
- Location
  - Immediately surrounded by the City of Hanford
- Decision Making Process
  - Owner of Curtis Water Company passed away
  - Curtis Water Company to be owned by City of Hanford
  - Old wells and piping would need to be replaced
- Funding Source(s)
  - Drinking Water State Revolving Fund
- Cost (application, design, capital, operations)
  - \$1,050,000
- Challenges
  - Lack of funds to pursue solutions (no reserves)
  - Age of existing system
- Time Frame (identification of problem to completion of solution)
  - 2000 to 2005
- Other

#### 1.4.6 Rodriguez Labor Camp with Richgrove CSD

- Problem (quantity, quality)
- Solution
  - Obtain water supply from Richgrove CSD
  - Richgrove CSD install new well and tank to connect to Rodriguez Labor Camp
- Location: southern Tulare County

- Decision Making Process: Consolidation of funding applications and respective projects was encouraged by CDPH. An agreement was drafted by Self-Help Enterprises and negotiated through a series of meetings between Richgrove CSD staff and directors and the owners of the Labor Camp. Approval of the extra-territorial service was granted by LAFCO.
- Funding Source(s)
  - Proposition 84, Community Development Block Grant (CDBG) / Tulare County
- Cost (application, design, capital, operations)
  - Planning, Test Well and Design, appx \$500,000
  - Construction \$4,500,000
- Challenges:
  - Lack of high-quality drinking water in the area necessitated a move to a well site 2 miles west of Richgrove, but near the labor camp
  - Slow progress, hampered by funding timelines, resulted in a delay during which a local farming operation began drilling a well within 200 feet of the planned well site.
- Time Frame (identification of problem to completion of solution): Construction could begin in 2013 if problems with competing well are resolved. Planning process, including well site search and test well, took approximately 30 months.
- Other

#### 1.4.7 Matheny Tract with City of Tulare

- Problem (quantity, quality)
  - Nitrate and Arsenic above MCLs
  - Old cracked, leaking pipelines
- Solution
  - Consolidation with the City of Tulare
  - Destruction of existing water supply wells
- Location
  - South of Tulare, West of Highway 99
- Decision Making Process
  - Feasibility Study identified consolidation as best option, after encouragement by CDPH (which declined to pay for replacement supply wells)

- City did not require annexation as a requirement for service, but did require upgrades to the aged distribution system internal to the community.
- Service to Matheny Tract was initially approved by the City's Public Works Commission, and then by the City Council and lastly by LAFCO. An agreement was drafted by Self-Help Enterprises and executed by the Mutual Water Company and the City of Tulare
- Negotiations were chiefly brokered by Self-Help Enterprises, with strong support from certain officials within the City of Tulare
- Funding Source(s)
  - Proposition 84
  - State Revolving Fund
- Cost (application, design, capital, operations)
  - \$500,000 Feasibility Study
  - \$500,000 Design and Non Construction
  - \$4,500,000 Construction
- Challenges
  - Connecting to 300+ services on private property
  - Insufficient funds to cover private property connections
- Time Frame (identification of problem to completion of solution)
  - Feasibility Study completed in 20??
  - Application for Construction Funding submitted, planned construction in 2013
- Other

## **1.5 County Operation of Multiple Zones of Benefit or County Service Areas**

[Fresno County CSAs]

[Tulare County CSAs]